FINANCIAL TIMES

No. 27,490 Monday February 20 1978 ** 15p

CONTINENTAL SELLING PRICES: AUSTRIA Sch.15; BELGIUM Fr.25; DENMARK Kr.3.5; FRANCE Fr.3.0; GERMANY DM2.0; ITALY L.500; NETHERLANDS Fl.2.0; NORWAY Kr.3.5; PORTUGAL Esc.20; SPAIN Ptas.40; SWEDEN Kr.3.25; SWITZERLAND Fr.2.0; EIRE 15p

EWS SUMMARY

gyptians raid yprus airport

n commandos, in an -style action, stormed Airport in Cyprus in free 11 hostages being Arab terrorists in a Airways jet.

00 commandos fought gun-battle with the ypriot National Guard least five Egyptians led as the guardsmen back the Egyptian

: fracas the 11 hosd four crew members escued. The two ans holding them surrendered to the Guard.

iostages were seized rday after the two killed Mr. Yousef leading Egyptian polit a conference in a Nicosia hotel.

The aircraft had returned to Cyprus after landing at the Red Sea republic of Djibouti during the night. It was refused permission to land in Algeria and other Arab states.

The commandos landed in Larnaca without the Cypriot Government's permission, although Egypt claimed that Mr. Mamdouh Salem, its Prime Minister, had contacted the Cypriot authorities to tell them that an Egyptian jet would go to Cyprus to help release the hostages.

Cyprus Radio said that 38 Egyptian commandos, who went into hiding in a jet at the airport after the failure of their raid, had given themselves up to the Cypriot authorities after negotiations.

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n-West was described antic Siberian waste the RAC as the worst or many years cut off villages in Dorset and l blocked hundreds of oads.

a's water authority 00,000 homes to have water supplies cut by Many TV screens blacked out.

dvised employers in ne South-West to tell oyees not to travel to y. Somerset County ools are being closed er notice.

icopters dropped suparooned householders nimals. In the Bourne l Poole area, thieves tage of the conditions series of smash and ries.

statement

Mason, Northern retary, is expected to Commons statement consulting the Prime Chequers yesterday rity in Ulster in the week-end restaurant hich killed 12 people d 30. Back Page

ecklace

sold a Cartier's d diamond necklace at a £3.4m. week in St. Moritz, Swit-

n Iran

were killed and 125, 1 policemen, injured vernment rioting in rth-West Iran. The id to be Islamic ripped up parking set four hotels alight. called its ambassador after Kenya protested s support for Somalia with Ethiopia.

quarters

ian 15,000 forces' rters are unoccupied, o the latest official ich show a rise of ar. Many servicemen amilies cannot afford t was claimed.

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l died in a fire which e top floor and roof form, in Pall Mall,

: Rambert, founder of ompany which bears s 90 to-day.

Labor Party has lrastic cuts in immiause of high unem-

Bond £50,000 weekly to Merton, London, o. 4RK 027384.

ganda material was when police broke up in a West Berlin bar.

BUSINESS

Oil rigs hit by dispute over radio men's pay

● OPERATIONS on about a dozen North Sea oil rigs will be disrupted to-day as radio controllers start a work-to-rule because of a pay dispute. The 44 radio controllers, employed by Marconi Marine, have key jobs, maintaining communications with shore bases, helicopters and supply vessels.

No major interruption to oil production is expected initially, but oil companies have said they are taking the action seriously because a prolonged dispute could threaten their supplies. Back Page

● CBI has set up a working party—consisting of senior executives from companies with experience in Government contracting—to prepare a detailed case against the Government's plan to enforce pay limits through public sector contracts. Page 4

● COMPANY EXECUTIVES should be released for one or two days a month to act as non-executive directors of non-competing companies, says the CBI in supplementary evidence to the Wilson Committee on City Institutions. Back Page

● DIRECTORS of companies with management difficulties will be able to raise the problems with the City's Institutional Investors' Committee. Until now, the committee, formed in 1973, has taken action only when worries about a company were raised within the investment community. Back Page

Ministers hold Budget talks

● CABINET Ministers spent more than four hours at Chequers yesterday discussing the Budget which Mr. Denis Healey will present on April 11. The Chancellor is leaning towards a more cautious approach than seemed probable a few weeks ago. Back Page

● CONSUMERS are adopting a slightly more cautious view of the future but still feel much more secure than a year ago, according to the latest FT survey of consumer confidence. Page 26

●NATIONAL SAVINGS attracted a further £194.7m. in net receipts last month, taking total funds to £9.74bn.—over £2bn. higher than a year ago. Page 4

● ALFA ROMEO, Italy's State-controlled car maker, is to build a new plant at Naples — providing up to 1,400 new jobs — *despite the heavy losses of its* Alfa Sud operations in the area. The decision is part of a new labour contract agreed after nearly a year's negotiations. Page 25

● JAPAN has obtained a contract to build a $80m. gas gathering and processing plant in Bahrain. Page 3

ONTENTS OF TO-DAY'S ISSUE

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Top White House talks as coal peace moves break down

BY STEWART FLEMING: NEW YORK, Feb. 19

With one of the most severe winters in memory gripping parts of the country, and extensive power cuts and job lay-offs *threatened in the Middle West*, top White House and administration officials met to-day to decide *how to break the stalemate in the* 75-day-old coal dispute.

Amid growing concern about the impact of the strike on the economy, Mr. James Schlesinger, Energy Secretary, Mr. George Schultz, chairman of the Council *of Economic Advisers*, Mr. Ray Marshall, Labour Secretary, and Mr. Robert Strauss, Special Trade Representative were locked in discussion with special advisers to President Carter, including Mr. Jody Powell and Mr. Hamilton Jordan.

Late last night, after more than 40 hours of almost con*tinuous efforts to mediate in the* dispute between the United Mineworkers of America and the Bituminous Coal Operators' Association, Mr. Marshall declared: "There is no basis for further negotiation."

It was hinted that the Government may consider "undesirable but probably necessary" alternatives to *negotiation* in the disputs at the hear of which are differences over a basic wage and benefit increase of 37 per cent. to about $10 an hour.

Because of the protracted strike, state troopers have been protecting trucks moving coal by road in Indiana. Ohio Edison, which produces electricity in the key Cleveland industrial area of the state, has forecast power cuts this week, of 25 per cent. to big industrial users.

It, and other utilities, have given a warning that by early March cuts of a half can be anticipated. Such cuts would seem unavoidable given the two-weeks it takes for the 160,000 miners to *ratify any agreement.*

Mr. Marshall said that despite the breakdown he intended to keep in touch with both sides in the hope that the prospect of further Government intervention would soften the positions being taken.

The current impasse has been reached in spite of concessions by the coal companies which offered not to impose financial penalties on unofficial strikers and to restore the cost of living-related wage benefits.

One of the proposals believed to have been examined by Administration officials is Government seizure of the mines, although this is thought to be unlikely at this stage.

In 1946 President Truman seized the coal mines under the terms of the Wartime Labour Disputes Act. In the settlement which the Government then reached with John L. Lewis, union president, the miners won major concessions including the creation of union-run health and retirement funds.

Two deaths

The coal companies' efforts today to change the structure of these funds and bring them under individual company rather than union controls is one of the key factors in the dispute. The miners see this as a step towards company-by-company bargaining in the next contract and thus a threat to the union's existence.

However, seizure of the mines, or another possibility forcing both parties to adopt binding arbitration, would require new legislation and this would take *time*.

Another proposal being discussed is recourse to the existing U.S. labour laws, in particular the Taft-Hartley Act. This allows the President in a national emergency to ask the courts for an injunction forcing strikers back to work for up to 80 days while negotiations continue.

In a meeting with the President last week, governors of several coal producing mid-West states warned that the miners might simply ignore such an injunction.

The President said yesterday that the law has never been successfully used in a coal industry dispute and described resort to *Taft-Hartley* as "*a major loss* for our country.

It would also weaken an already strained relationship between the President and organised labour, normally a powerful supporter of Democratic Presidents.

There have been two deaths by shooting during the dispute in fights between union and non-union mines. Coal barges on the Ohio River have been fired on, apparently by striking miners. It will be difficult now for the Administration to avoid severe if localised power problems unless major concessions are forthcoming at the bargaining table.

John Leach writes from **Chicago**: America's Middle West, where much of the country's

Continued on Back Page

Power workers threaten industrial action on pay

BY PAULINE CLARK, LABOUR STAFF

MILITANT power workers and leaders of the unofficial work to rule which caused blackouts in millions of homes and factories last autumn are stepping up the pressure for industrial action if their pay demands are not met.

Mr. Frank Chapple, general secretary of the Electrical and Plumbing Trades Union, has warned that the Government and employers will ignore the militants' demands at their peril.

Intensify

Last week he rejected an offer of 10 per cent. plus an extra £3.60 productivity payment. He is pressing instead for more than three times that amount, to bring bonuses in line with those of surface workers in the coal industry. Negotiations resume on March 2, with settlement due a fortnight after that.

Plans by *militant* shop stewards to intensify pressure on their negotiators became clear over the week-end.

A *meeting in Doncaster of* about 100 shopfloor representatives on the industry's national unofficial stewards' committee not only "*wholeheartedly*" endorsed their union leaders' rejection of the latest pay offer but also issued their own instructions to all power stations and depots to prepare for action.

The shop stewards, many of whom say they are disenchanted with the four unions in the industry because they feel the shopfloor is not being adequately represented, also demanded "full consultation" with the workers before any settlement is reached.

And to press home their determination that union leaders take account of feelings at the grass roots, the committee issued a constitution for a separate Electricity Power Workers Association.

The idea of setting up such an association either as a breakaway union or as a *supplementary* pressure group for union members is scorned in some quarters *within the unions* as being unlikely to serve a useful purpose.

But the constitution and terms *of membership proposals* deliberately come at a delicate stage in the industry's pay negotiations.

The militant stewards can hope to raise the psychological pressure on the union hierarchy before the March 2 meeting.

The acceptance last Friday by the Electrical Power Engineers Association—the technicians and managers' union—of a 12 per cent. pay rise including 2 per cent. from productivity is bound to add to the manual workers' difficulties around the negotiating table.

Argument

But the unofficial stewards committee and union negotiators united this week-end in rejecting *in advance an argument by the* Electricity Council that this must necessarily place lower limits on the manual workers' claim.

Mr. Jack Biggin, national power industry negotiator in the General and Municipal Workers Union, pointed out that such a percentage rise for technicians and managers already on between *£7,000 and £10,000 a year, meant* a great deal more than it did for a manual worker on £39 a week.

Cost of Speke closure may be in Leyland's 1977 accounts

BY TERRY DODSWORTH, MOTOR INDUSTRY CORRESPONDENT

BRITISH LEYLAND may take the costs of closing its Speke plant in Liverpool into its accounts for last year. The closure is due within the next few months.

This highly unusual move is being considered as part of a plan to deal with as many of Leyland's financial problems as possible in an exceptional items provision in the 1977 accounts.

According to Leyland executives, losses written off in this way could range between £50m. and £100m. Before taking that into account, Leyland's trading profit is expected to be about £5m.

Restructuring

Although the company has adopted these accounting techniques before — notably when the 1975 accounts were used for losses incurred in closing, or part closing, the company's businesses in Spain, Italy and Australia — the procedure this time faces an unusual difficulty as most of the "exceptional" losses will be incurred in the 1978 financial year.

Leyland now reports on a January to December basis, which means that the Speke closure, and any restructuring it may do in South Africa or its other overseas businesses, has yet to take place.

In the Speke case, Mr. Michael Edwardes, *Leyland's new* chairman, is faced with the additional problem of having insisted to the trade unions that the company did not make up its mind on closure until February this year.

Less favourable

So he cannot argue that the financial provision falls logically within the 1977 year on the ground that the decision was taken then.

Whatever the final decision on the exceptional items, the rest of the Leyland accounts, due to be published in March, will show the need for the radical re-structuring of the company's finances for which Mr. Edwardes is now pressing.

Losses were particularly heavy in the international division, partly because of a new, and less favourable, transfer pricing agreement with the cars division, and partly because the improvement in the value of sterling *adversely hit export conditions.* Some currency losses could be taken into the exceptional items.

But, apart from the Special Products division, which made a profit of about £10m., the rest of the manufacturing activities did not perform well.

The Truck and Bus division, which has been steadily losing market share in the U.K., and coming under increasing pres*sure overseas, is believed to have* made only about £15m.

The Car division made less than £20m., in spite of the more favourable transfer pricing agreement with Leyland International

These results come in a year in which most of the world's motor companies were able to declare record profits.

Refuse work

Our Labour Staff adds: Leyland shop stewards on the powerful stewards combined committee will ask workers in the Midlands to refuse work transferred from Liverpool if an *acceptable formula for closing* TR7 sports car production at Speke is not reached.

After a meeting at the week-end the shop stewards pledged full support for "any action" union leaders or Speke workers might take to prevent the loss of some 2,800 jobs under Leyland's Merseyside closure plan.

Next Friday, a vote will be taken on whether to call off the 16-week strike at Speke by 1,800 hourly-paid workers. The management has called in 200 maintenance men to clear the way for resumed production.

Ford strike ends, Page 5

Left still ahead in French elections

By Robert Mauthner

PARIS, Feb. 19.

WITH ONLY three weeks to go to the first round of the French General Election on March 12, the parties of the Left have maintained a substantial lead in the public opinion polls.

But the latest survey shows that the final outcome of the election remains very much in doubt.

A Louis Harris poll, due to be published by the news magazine L'Express to-morrow shows little change.

The parties of the Left combined are given some 51 per cent. of the total vote in the first round—26 per cent. for the Socialists, 20 per cent. for the Communists, 2 per cent. for the Left-wing Radicals, and 3 per cent. for a number of extreme Left-wing groups.

The Government coalition parties and other Right-wing groups are accorded 45 per cent. with 22 per cent. of the voters opting for the Gaullists, 19 per cent. for President Giscard's Republicans and their centrist allies, and 4 per cent. for the extreme Right.

The poll shows that the Communists hold the key to the final result. If, in the vital run-off on March 19, they stand down in favour of Socialist candidates in the constituencies in which the latter are the leading representatives of the Left in the first round, the Left should win an overall parliamentary majority.

But if the Communists refuse to make an electoral pact with the Socialists between the two rounds, the present Government coalition parties are expected to obtain a large majority.

THE Government's hopes that the improved performance of the economy in recent weeks would help their election prospects have suffered a sharp setback with the announcement that the trade *balance swung back into* deficit in January, after moving steadily into surplus in the last quarter of 1977.

Seasonally adjusted, the deficit last month amounted to Frs.1.85bn. (about £200m.), compared with a surplus of Frs.1.66bn. in December.

The Trade Ministry said that last *month's* shortfall was almost entirely due to a deterioration in the balance of agricultural trade, itself the result in changes in the Common Market's price mechanisms and the *devaluation* of the "green franc."

On the prices front, too, fresh problems are appearing. After dropping to only 0.3 per cent. in December, the monthly rate of inflation is again expected to jump in January and February this year.

Feature Page 23

CBI worried by slump in export orders

BY KENNETH GOODING, INDUSTRIAL CORRESPONDENT

THE deterioration in manufacturing industry's export order books continued during the past month and the Confederation of British Industry says to-day that "the picture is worrying."

The CBI's monthly industrial trends inquiry, carried out between January 31 and February 15, showed that only producers of consumer goods were relatively less pessimistic than in the past.

Overall, there has been a considerable fall in export order books during the past 11 months.

This will be disturbing for the Government, which is still puzzling over the January balance of trade statistics which reflected a marked decline in the volume of exports since the late summer.

The trend is not fully explained by the slow growth in world trade. Neither would the erosion of the U.K.'s relative price advantage since the recent rise in sterling normally be expected to have an impact until later in the year

Total order books among the 2,025 companies questioned remained weak up to February 15, although slightly less so than was typical in the previous six months.

In only a few industries, in particular electrical engineering, did more than a third of participants regard the volume of their present order books to be "above normal."

The indications about prices *are reasonably good.* The balance of companies expecting to increase home prices during the next four months remains very low by the standard of the past four years and is much as it has been for the past two or three months.

The four-month forecast for the volume of output is also much the same as in the months since September, suggesting that most companies do not expect an acceleration in the growth rate of production.

The CBI says, however, that in some diverse areas—including electronic goods, furniture, resins, and plastics — activity seems likely to pick up.

Stocks of finished goods remain more than adequate in manufacturing industry as a whole and it does not seem that any widespread running down of finished goods stocks is under way. In only a handful of the 44 detailed industry groups were there more than one in five companies with inadequate stocks.

Nationalists likely to back Scots Bill

BY RAY PERMAN, SCOTTISH CORRESPONDENT

LEADERS OF the Scottish National Party are likely to decide to-day to support the third reading of the devolution Bill in the Commons this week, thus making it highly probable that it will pass.

In the vote—on Wednesday night—Ministers will be able to count on the assistance of the Liberal Party and the loyalty of all but a handful of Labour backbenchers, in spite of the fact that 49 Labour MPs helped to defeat the Government over amendments to the Bill last week.

If it survives the third reading, the Bill will have come through the most dangerous part of its passage. It will still face amendment in the Lords, however.

The Nationalists have been angered by the proviso inserted into the Bill against the Government's wishes requiring 40 per cent. of the total Scottish electorate to vote for devolution in the proposed referendum before a legislative assembly can be set up in Edinburgh.

Senior Party officials and some of its MPs have claimed that this amounts to rigging the referendum in advance and there has been talk of the party washing its hands of the whole affair by attempting to vote down the Bill or abstaining.

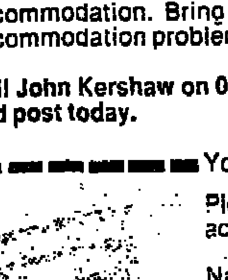
Party leaders and MPs, however are expected to agree at a meeting in Glasgow to-day to continue support for the Bill, in spite of its defects.

The most powerful arguments for this course are that the 11 Nationalist votes at Westminster might not be decisive in killing the Bill and that a general election would not necessarily follow if the Government were defeated on Wednesday.

Mr. James Callaghan has said that he will not treat the vote as an issue of confidence. Labour MPs will, however, be subject to a three-line whip.

The Nationalists would welcome an election now. They feel the Government would be vulnerable in Scotland, because of its failure to reduce unemployment.

Editorial comment, Page 12



Rhodesia talks still facing interim government hurdle

BY TONY HAWKINS

SALISBURY, Feb. 19.

DELEGATES FROM the four parties engaged in Rhodesia's domestic settlement talks meet in full plenary session to-morrow to try and resolve the final outstanding major hurdle to an agreement. That is—the structure, composition and duration of an interim government to supervise free elections and pave the way for a one-man-one-vote government late this year or early in 1979.

At last week's talks the strictly constitutional problems were solved "in principle" (though there is detailed drafting to be done) and the delegates reported also that they had reached agreement "in principle" on a "statement of intent" about the future composition of the security forces.

This leaves the interim government problem to be resolved and politicians here say that this could be done in time for a signing ceremony within the next fortnight or possibly within a few days. The disagreement on the interim government is between all three nationalist parties on the one hand—who have reached a consensus on what they would like to see—and the Smith government on the other.

At the root of the disagreement is Mr. Smith's fear that any majority rule executive being "imposed" on the country before his promised referendum could dangerously undermine his position at that referendum. The blacks want a system whereby 75 per cent. of the ministerial posts would be held by the nationalists and only 25 per cent. by Mr. Smith's ruling Rhodesia Front.

They say also that parliament should be recessed and the country governed by degree pending the final drafting of the constitution, registration of voters and determination of constituences. Only when all this has been done can the plan be put to the 100,000 white voters at a referendum. Mr. Smith fears he could lose that referendum if he has already accepted a majority rule executive—with many more black than white ministers—and has agreed to government without the popularly (in terms of the white electorate) elected legislature.

But the Prime Minister is being told by at least some of his advisers that what matters now is winning black rather than white acceptance. His advisers are saying that if the interim government is seen by the country's black majority to be in any way "phoney" then the whole plan will collapse. This is believed to be a much more real danger than that of rejection at the referendum by whites.

Difficult though the problems of reaching agreement on an interim administration may yet turn out to be, there is little doubt here that there will be a deal fairly soon.

● Black leader the Rev. Ndabaningi Sithole said in London over the week-end he was "quite optimistic" and that the British Government would accept the constitutional agreement reached last Wednesday between Rhodesdia's Mr. Ian Smith and moderate nationalist leaders including himself.

Mr. Sithole is to have talks with Mr. David Owen, the Foreign Secretary on Monday.

Front line states may meet soon

BY MICHAEL HOLMAN

LUSAKA, Feb. 19.

THE VISIT of Mr. Joaquim Chissano, Mozambique Foreign Minister to Lusaka this weekend, carrying a message for President Kaunda from President Machel, has led to speculation that the five front-line states may meet soon to consider the implications of the Salisbury agreement between Prime Minister Ian Smith and three internally-based black leaders.

The five—Mozambique, Zambia, Tanzania, Botswana and Angola—last met in the Mozambique town of Beira shortly before Christmas. The outcome was a four-point declaration which included support for the "positive aspects" of the Anglo-American settlement plan for Rhodesia, and a reaffirmation of its commitment to the guerilla-backed Patriotic Front led by Joshua Nkomo and Robert Mugabe.

Although the Governments of Zambia and Mozambique have condemned the Salisbury agreement—and there is no sign that the other front-line members differ—the presidents may share the concern of nationalist officials here over the wait-and-see attitude of Britain and the U.S., and the possibility of a split in the Organisation of African Unity over recognition of a predominantly black administration in Salisbury.

A third issue may be the increasingly important role of Zambia in the five-year war. Up to now the main guerilla offensive has come from the Mozambique bases of Robert Mugabe's Zimbabwe African National Union army, of whom some 3,000 are inside Rhodesia.

However, only 500-600 guerillas of Joshua Nkomo's Zimbabwe African Peoples Union are inside the country. Yet the Zapu army is estimated at 6,000 (with at least as many in training) based in Angola and Zambia.

Debate call on Israeli links with Ethiopia

By L. Daniel

JERUSALEM, Feb. 19.

AN URGENT Knesset debate has been called for by a prominent member of Israel's Labour Party, now in opposition, on Foreign Minister Dayan's statement in an interview in Zurich a week ago, that Israel was rendering limited military aid to Ethiopia.

It was this statement which caused the Ethiopian Government to expel all Israelis within 48 hours, M.K. (Member of Knesset) Yossi Sarid stated on Israeli television last night. He said that no Israeli nationals have remained in Ethiopia, but some sources here claimed this morning that several commercial representatives had been allowed to stay on.

Gen. Dayan's statement was, until last night, almost studiously ignored both by the local press and Israel radio and TV. While the fact that Israel has rendered limited assistance to Ethiopia in the past had been known, it was not given any publicity. This assistance, according to reports published abroad, included the training of Ethiopian troops by Israeli instructors on Soviet tanks at their disposal.

John Worrall adds from Nairobi: The Kenyan Government this week-end said it had not been informed that Iran was recalling its ambassador from Nairobi and closing its embassy. The announcement was made in Tehran on Saturday by the Iranian Foreign Minister, Mr. Abbas Ali Khalatbari.

Acting Kenyan Foreign Minister, Mr. James Osogo, said the Kenyan Government had not been informed of anything officially.

A row erupted after Kenyan protests on television about Iran's involvement in the war in the Horn of Africa on the side of Somalia. "Iran is not an African country to take part in African issues," it was said.

Egyptian intervention ends in bloodshed

LARNACA, Feb. 19.

ALL THE hostages aboard a commandeered Cyprus Airways DC-8 plane escaped safely to-night after a fierce gun battle between Egyptian commandos and Cypriot security forces at Larnaca airport in Cyprus.

An official in the control tower, contacted by telephone, said the shooting broke out when Egyptians tried to storm the plane, which was being held by two unidentified gunmen.

He said the Cypriots immediately intervened to prevent the action and killed at least five commandos and wounded many more. Palestinian sources here said earlier at least 15 Egyptians had been killed.

The official said: "The tarmac is like a battlefield, but all the hostages and the crew are safe."

Michael Tingay writes from Nicosia: The Egyptian intervention in the Cyprus hijacking and the fighting with Cypriot security forces which it triggerred, is the second major diplomatic intervention recently made by President Sadat.

Only a week ago he detained two Kenyan passenger planes at Cairo after an Egyptian plane was forced by the Kenyan Air Force to land at Nairobi. This was during an attempt to overfly Kenyan airspace on an arms supply run to Somalia.

The Cyprus incident is more serious, because lives have been lost and because it has put at risk the good relations between Nicosia and Cairo, which were fostered so carefully and successfully by the late Archbishop Makarios, who strove to keep Cyprus out of the Arab-Israel disputes.

The murder in Nicosia of Mr. Yusef Sibai, the prominent Egyptian writer and former Minister of Information, was the most violent anti-Egyptian incident since President Sadat's peace initiative with Israel last November. Bombings and shootings against Egyptian embassies have so far resulted in little damage.

That four Palestinians, including two PLO officials, known to line up with PLO Chairman Yasser Arafat should have been taken hostage is the most public indication yet of the political disarray among the Palestinians. Observers said that Arabs may have begun to over-react in many different ways, regardless of their political colour.

One of the factors which may have encouraged the Egyptian Government to try to intervene at Larnaca is that Cyprus has gained the reputation in extremist Arab circles as a soft Government following the breakdown of a secret agreement negotiated by the late Archbishop Makarios with Israelis and Palestinians to keep Cyprus out of their disputes.

The Sibai incident and the more serious Larnaca fiasco is the third major incident involving Cyprus, in the past six months.

Last September, the Nicosia Government permitted an Algerian and a Palestinian guerilla to go free after they had hijacked a plane from Spain and made demands for the release of prisoners in Israel. Soon afterwards Cyprus was involved in a dispute with West Germany, when Nicosia refused permission for a West German commando team, including British men from the Special Air Service, which had landed at Larnaca to attack the plane which was subsequently stormed dramatically at Mogadishu. Observers believe it was the Mogadishu incident and the anger felt in Egypt after the murder of Mr. Sibai in Nicosia which led to President Sadat's decision to send in commandos regardless of the attitude of the Cyprus Government.

Begin is 'crying for the moon' says Sadat

BY ROGER MATTHEWS

CAIRO, Feb. 19.

PRESIDENT SADAT of Egypt said to-day that he could not understand how the United States could support his peace efforts while at the same time lavishing arms on Israel.

In an interview with the weekly "October" magazine Mr. Sadat argued that Israel could play with the idea of peace simply because of the enormous quantity of military equipment that had been received from Washington.

He once again dismissed the F-5E fighters which President Carter has agreed to sell to Egypt as "tenth-rate planes." He argued that Israel objected to the sale of the F-5's because it wished to monopolise links with the U.S. and feared that aircraft sales might be followed by the supply of equipment to the Egyptian army.

Mr. Menahem Begin, was "crying for the moon." President Sadat said, if he thought he could have both territory and peace. Mr. Sadat thought that Mrs. Golda Meir, the former Israeli Prime Minister, would have been a much better negotiating partner than Mr. Begin.

It is becoming increasingly clear that Egyptian officials believe that Mr. Begin is personally responsible for the lack of progress in the Middle East peace talks, and they intend to continue "courting the Israeli public."

Mr. Sadat is reported to have recovered some of his optimism since his talks with President Carter. There is also satisfaction that Dr. David Owen, Britain's Foreign Secretary, is to visit Israel. It is supposed in Cario that his trip is aimed at persuading Israel to be more flexible on the issues of settlements in Sinai, and a homeland for the Palestinians.

Mr. Andrew Young, Washington's Ambassador to the United Nations, has nevertheless caused some irritation here with his weekend remarks that the U.S. had to provide Mr. Sadat with aircraft in order to forestall the threat of a military coup. While senior generals have undoubtedly been pleased at Mr. Carter's arms offer they are equally well aware that Mr. Sadat's initiative has failed to alter the balance of power in the Middle East and that the U.S. does not intend to match the Soviet Union's arms supply role during the early 1970s.

Another reported coup threat came in an official statement from the military prosecutor yesterday. He stated that 34 members of a Communist organisation, whose arrest has been previously announced, were to stand trial on charges of attempting to stage a coup. They are accused of trying to change the system of Government by preparing acts of sabotage and fomenting sedition among students. A number of Communist leaflets are said to have been found in their possession.

● Syrian President Hafez Al-Assad leaves to-day on a three-day visit to Moscow seen as part of efforts to increase the political and military standing of the five-member Arab "resistance front" forced last year.

Information Minister Ahmed Iskander, told Reuters to-day the President's talks would focus on a strengthening of Syrian-Soviet relations and their "joint struggle against imperialist aims in Arab territories."

W. German terrorism law threatened by the liberals

BY JONATHAN CARR

BONN, Feb. 19.

THE ANTI-TERRORISM measures passed by the Bundestag with a majority of only one vote may not become law in their present form — and will continue to be a source of friction between the West German government coalition partners.

This became clear following an interview given to-day by Herr Hans Dietrich Genscher, leader of the Liberal Free Democrats (FDP), junior partner in the coalition. He was noticeably cautious about the FDP's attitude during the rest of the legislative process through which the anti-terorism steps must pass.

The FDP is angered because the proposals it introduced with its Social Democrat (SPD) partner were almost torpedoed by four SPD deputies who decided to vote against them. The conservative CDU-CSU opposition voted en masse against the measures, saying they were too weak.

The FDP could now try to use its influence in the Bundesrat, the second chamber grouping representatives of the provincial states, to prevent rejection there of the measures. It has such leverage because in two states it is in coalition with its opponents at national level, the CDU.

But to-day Herr Genscher said he could not prejudge the attitude of these States, adding sharply that it was not up to the FDP to use its provincial coalitions with the CDU to correct the internal problems of the SPD.

This statement is one of the clearest examples yet of a greater coolness between the SPD and FDP—already exemplified by the aloof attitude of the Liberals when Chancellor Helmut Schmidt recently reshuffled his Cabinet, replacing only SPD Ministers.

The anti-terrorism measures seem bound to go to the all-party Parliamentary arbitration committee where the CDU will seek to strengthen them.

Peru loan negotiations continue

By Franc[illegible]

NEGOTIA[illegible] gress bet[illegible] national [illegible] authorities to [illegible] a sizeable [illegible] loan which will help that country repay principal and interest payments falling due in 1978.

These payments will amount to some $300m. If all other forms of borrowing in foreign currency are included, debts to Western Governments, international institutions and banks worth about $1bn. will fall due for repayment this year. Some of this however is the kind of short-term trade finance which is automatically rolled over, but it is not known how much falls into this category.

Figures published last year by the Bank for International Settlements in Basle showed that major international banks had claims worth $2.99bn. on Peru while unused credit commitments only amounted to $590m. Of the $2.99bn., $1.22bn. was due to mature in 1977.

The banks negotiating with Peru are considering a loan of at least $260m. for five years with the grace period likely to be two years. Drawdown periods would be closely tied to that of the loan which the IMF is currently negotiating with the country. The spread the borrower will pay "is not expected to reflect the state of Peru's finances," one banker said. Essentially the banks will be trying to help Peru avoid a default on its debt which would have far-reaching repercussions.

Mrs. Bhutto re-arrested

By Simon Henderson

ISLAMABAD, Feb. 19.

THE wife of Pakistan's detained former prime minister, Mr. Zulfikar Ali Bhutto, was put under house arrest to-day for the fourth time since the military ruler, General Zia ul Haq, took over last July. Mrs. Nusrat Bhutto, who is leading the Pakistan People's Party during her husband's trial on a murder charge, has to stay in her Lahore home until Tuesday night. Previous house arrests have prevented her leading demonstrations in protest against Mr. Bhutto's detention. Mindful of a riot that occurred when she attended a cricket match last December, the authorities military government's action enabled the India/Pakistan hockey international to pass off in the city without incident this afternoon. A large crowd including General Zia watched India win 2—1.

China's Parliament

PEKING, Feb. 19.

CHINA'S parliament will meet on February 26, the New China News Agency (NCNA) announced to-day.

The fifth National Peoples Congress, the country's rubber stamp parliament will put the official seal of approval on the changes that have taken place in the country since the death of Mao Tse Tung in September 1976 and the battle against the extremist influence that still continues.

The session is also expected to give the clearest insight yet into the country's present power structure.

Italian Communists call truce for all-party talks

BY DOMINICK J. COYLE

ROME, Feb. 19.

ITALY'S Communist Party to-day temporarily set aside its political demands, as the country's six parties try to reach a compromise agreement on the terms of an emergency economic programme.

The PCI is not dropping its demands—for a clear and unambiguous place in the next governing majority—but the party signalled over the weekend that it was agreeable to a "pause" in the political dialogue on the precise shape of the next Italian Government, to allow Sig. Giulio Andreotti, the Christian Democrat (DC) Prime Minister-designate, to try to win all-party agreement on an economic plan.

Sig. Andreotti will resume in the morning his talks with experts of the main opposition parties, including the Communists. The negotiations will tackle the mounting public sector deficit, moves to avoid a number of pending referenda (including one on the sensitive question of abortion), steps to combat rising unemployment, and measures to improve the maintenance of law and order.

The Prime Minister-designate is also expected to meet with trade union leaders later this week to discuss their opposition to aspects of his outline economic programme.

But the nub of the crisis, which has left Italy without a Government for just over one month remains political. The Communists, who at first demanded seats in the next Cabinet, now insist that their support for a new administration will depend on the Christian Democrats accepting the PCI for the first time in 30 years as part of a Parliamentary majority sustaining a new minority DC Government.

The Christian Democrats, who traditionally have campaigned on a strong anti-Communist ticket, are reluctant to concede such enhanced political status to the PCI, in part because over one-third of the Party's backbenchers have warned Sig Andreotti that they will reject such a proposal.

Following a fresh round of talks with party experts this week, Sig. Andreotti is expected to call another collegial meeting of party leaders and it is also likely that the DC Parliamentary Party—if not, indeed, the Party's national executive—will be summoned into special session to determine finally what, if any, compromise is to be agreed with the Communists.

Very low poll in Soweto

BY QUENTIN PEEL

JOHANNESBURG, Feb. 19.

ONLY 492 voters went to the polls in Soweto this week-end to elect a Community Council — the body proposed by the Government as a municipal authority for the 1m. plus black township complex. The voters represented just 6 per cent. of the eligible electors in two Soweto wards where there was a contest, while another nine candidates were elected unopposed. There were no candidates in 19 of the 30 wards.

The stay-away follows calls by several radical black movements, including the Soweto Committee of Ten, whose members are all in detention, and the Soweto Action Committee, its successor, to boycott the elections. They were supported by Chief Gathsha Buthelezi, the influential Zulu leader, who forbade any of his followers from standing as candidates.

Dr. Connie Mulder, the minister responsible for black affairs (as Minister of Plural Relations and Development), has announced that he plans to call by-elections in the vacant seats, in spite of the apparent lack of interest. Soweto has 126,700 registered voters out of an estimated 300,00 eligible to vote.

Financial Times, published daily except Sundays and holidays. U.S. subscription $200.00 (air freight) $360.00 (air mail) per annum. Second class postage paid at New York, N.Y.

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WORLD TRADE NEWS

Japanese win $80m. order or Bahrain gas project

DOINA THOMAS

BAHRAIN. Feb 19.

AIN'S gas gathering and sing facility involving an nent of more than $80m., constructed by the Japan ompany. This is the first industrial contract for the se in Bahrain and is the 's first sizeable industrial since its participation in luminium smelter, the ful Aluminium Bahrain ny, in 1968.

gas gathering project, will collect the associated m Bahrain's onshore oil and produce propane, and naphtha for export, first major project e 18-month-old Bahrain l Oil Company (Banoco). is the youngest State oil y in the Gulf though ranks as one of the oil producers. At present sociated gas is either r vented at an estimated around 100m.-110m. cubic day.

bsidiary company is to up by Banoco to manage the project. The proposed capital of the new company is $20m. with minority stakes of 12.5 per cent. each being held by the Arab Petroleum Investment Corporation and Caltex, whose subsidiary, the Bahrain Petroleum Company, manages the island's oil fields. Apicorp is the $300m. capital organisation of Arab Petroleum Exporting Countries investment company which lends at commercial rates.

The Japanese bid is understood to have been in the region of $70m., and the total project including land reclamation and other construction work is expected to cost around $90m. The financing of the new company has not yet been completed but it is known that many of the 37 active banks in the $15.7bn. Bahrain offshore market are interested in managing the financing. Construction is expected to start in the autumn and the plant to come on stream in 1980.

This gas gathering and processing facility is seen as a move by Bahrain to conserve its hydrocarbon resources as well as a further step towards diversifying its sources of foreign exchange income. Although no news of possible purchasers of the gas products have been announced the project is considered highly viable and likely to repay its initial borrowings within five years.

Bahrain's oil fields, which produce around 65,000 barrels a day, are estimated to have a further life of about 20 years which means Bahrain will be the first Gulf oil exporter to exhaust its known reserves. But the island's natural gas reserves have been placed in the 6,000-10,000bn. cubic feet league.

In the 1978 budget Bahrain's own oil, together with revenues from the offshore field of Abu Saafa, which is shared with Saudi Arabia, is expected to provide an income of $404.5m. out of total estimated revenues of $700m.

K. machine tool success in U.S.

KENNETH GOODING, INDUSTRIAL CORRESPONDENT

.S. remained the British e tool industry's best market in 1977, according analysis of the official tatistics by the Machine rades Association.

Germany continued to be p provider of imported e tools.

U.K. industry exported of new and used e tools to the American last year and was therele to return to a balance- surplus with the U.S. from the U.S. totalled compared with 1976 when ched £23.7m. and exports 9.1m.

interesting factor to be by the statistics is the be newer machine-tool cturing countries are im- their performances. For , Spain last year ed a significant trade with the U.K. Exports n were down from £8.4m. to £2.8m. while imports om £3.7m. to £5.1m.

MTTA warns that the s can often be distorted things as the existence ngle order for a particu- pensive machine or, some- y political pressures.

inst a background of general recession in the world's leading industrialised nations, 1977 results are considered reasonable. However, the industry is by no means self-satisfied and has set itself an export-to-production ratio of 60 per cent. by 1980," a spokesman added.

As previously reported, exports of U.K. machine tools in 1977 reached £184.9m. (£176.7m. in 1976) while imports totalled £114.4m. (£142.4m.). This gave a favourable trade balance of £40.5m. against £34.3m. and took the industry's ten-year positive contribution to just under £400m.

Among the newer export territories last year were Iran (£9.5m.) in fifth place and Turkey (£5.9m.) in sixth place. While exports to Japan remained negligible, imports, too, showed only a minor increase, up £400,000 to £6.5m.

Fake 'Sheffield' cutlery

BY LYNTON McLAIN, INDUSTRIAL STAFF

BRITISH CUTLERY makers are importing cheap, foreign goods, stamping them "Sheffield" and selling them against genuine British products, Mr. John Price, chairman of the Cutlery Federation said yesterday.

He plans to ask Mr. Roy Hattersley, the prices and consumer protection secretary to amend the law to protect the public and the Sheffield industry.

"All you need to get round the law as it stands is a plating plant in Sheffield," he said. "British manufacturers can buy this cheap cutlery, plate it and stamp it "silver plate, Sheffield." Mr. Price wants to see the Trade Descriptions Act strengthened to stop the current practice.

He claimed that Sheffield may now be producing as little as 5 per cent. of the cutlery sold in Britain, as a direct result of the cheap imports.

In the decade to 1976 the proportion of imports more than doubled to 77.5 per cent. by value. In volume terms the number of imports almost trebled to 88 per cent. in 1976.

French protest over fastener imports

PARIS, Feb. 19.

THE FRENCH Bolt and Screw Manufacturers' Association have protested against low-priced imports which have resulted in French sales of domestically-produced products falling by 20 per cent. in the last four years.

The Association's president Henri Lorrain pointed out that while national production of bolts and screws totalled 160,000 tons in 1977 (or Frs.1.2bn. in value terms), this only accounted for 70 per cent. of French sales of 200,000 tons.

Importers are getting 30 per cent. of the French market by selling their products between 50-75 per cent. below those of French manufacturers, he remarked.

The industry, which is suffering from cash-flow problems, has turned to the French authorities "not to obtain subsidies, but to urge them to halt the entry into France of any product at any price," he said.

M. Lorrain noted that the recent increase of steel prices by between 8-17 per cent. will widen the price gap between French bolts and screws and those from abroad.

The biggest exporter to France is Italy, followed by West Germany, which together account for two-thirds of French imports of bolts and screws. France also imports from Japan, Taiwan and East European countries.

AP-DJ

Swiss deficit

By John Wicks

ZURICH, Feb. 19.

THE SWISS Foreign Trade balance showed a deficit of Sw.Fr.210.4m. for January after surpluses for the two previous months. But foreign-trade figures are not fully comparable with those for 1977, since industrial gold movements have at the start of this year been taken out of the statistics, while certain alternations have been made to chemical trade figures to put them in line with international standards. The absolute totals were higher by 5.6 per cent. for exports than those recorded for January, 1977 and by 7.8 per cent. for imports.

ARGENTINA

Crisis days for motor industry

BY ROBERT LINDLEY IN BUENOS AIRES

THE ARGENTINE motor industry, which contributes more than 10 per cent. of the country's gross industrial product, is in the deepest crisis of its 18-year history.

Deliveries of finished units to dealers declined 27 per cent. in November and 39 per cent. in December, when only 9,000 units were sold. In the same month, only 633 tractors were sold, a record monthly low. It is estimated that stocks totalling about 30,000 unsold units are piled up, plus what are in the hands of the dealers—30,000 units is the equivalent of about six weeks of normal production.

The 11 plants which make up the Argentine motor industry employ 592,000 people, all but 56,000 of them employed by suppliers. But the manufacturers have been forced to introduce rationalisation measures: reduced wages and prolonging and anticipating holidays. If there is no unforeseen increase in sales the next stage will be a shorter working week and, eventually, dismissals.

"The automotive industry here," Sr Raymundo Podesta, Secretary of Industrial Development, commented the other day, "always brings problems, never solutions." The Car Dealers Association, ACARA, puts it in another way: "We've never had an automotive policy in this country, and it's time we did have one."

If there has been a policy at all it has been one of protecting the Argentine industry from foreign competition. Recently a high functionary in the palace of the Treasury noted the circumstance that all the motor vehicle companies manufacturing here are part of big multinational companies "which did not get to occupy the positions which they occupy in the world market by means of official benefits." "Here," the official continued, "they have been operating for 18 years in a protected market, sheltered by special rules and benefits of different kinds, and they have not been able to come up with a product that can be sold on the world market for reasons of both price and quality. This is the case even though they have at their disposal the cheapest skilled labour force in the world. They don't even really compete amongst themselves, because all they do is divide up tranquilly—in some cases even by zones—a sure market. Now it turns out that they can't sell, so they cry out to high heaven and keep increasing their prices," he added.

But at last the Government appears to have decided to act. A committee appointed by the Economy Ministry has devised a project calculated to lower costs and stimulate competition. The committee proposes a reduction of the quotas of local industry components in motor vehicles, which are now fixed at 96 per cent. for cars, 93 per cent. for pick-ups and 90 per cent. for trucks. Also proposed is the elimination of the edict which prohibits manufacturers from importing parts which are identical to those already produced in Argentina.

The worst news for the country's motor vehicle manufacturers, however, is the committee's recommendation that importation of finished units be permitted now on the payment of a 95 per cent. tariff. The Committee's proposal for the tariff on imported engines is 70 per cent. and on parts 65 per cent. It is believed that the only differences within the team of Economy Minister Jose Alfredo Martinez de Hoz about the Committee's recommendations are on whether they should be applied immediately or gradually.

Out of every 155 pesos which a buyer pays for a new car in Argentina 30 go to the manufacturer of the finished product, 70 to the suppliers, between 15 and 21 to the dealers. The rest goes in taxes—VAT, the highway, steel, municipal and merchant marine funds, and the luxury tax. The Manufacturers Association claims that "only a gradual process, which necessarily must begin with the state," can bring down the costs of supplies and raw materials "which would permit the industry itself to attain a greater efficiency, resulting in the production of vehicles at prices more in line with international prices." The co-ordinating Council of the Auto-parts Industry is decidedly opposed to the recommendations of the Committee "and to anything else which is no more than a pretence at increasing efficiency." The Council maintains that, warts and all, the Argentine motor industry is the "most dynamic" of the country's manufacturing activities.

Notwithstanding the 10 per cent. which the motor industry here contributes to the gross industrial product, it is not a growth industry and has not been one for more than a decade. In 1976, the industry produced 0.5 per cent. fewer units than it did in 1965, while in the same period of time the Brazilian motor industry grew 432 per cent. and Mexico's by 234 per cent.

The Buenos Aires daily *La Nacion, commenting on the sad* state of the car industry in Argentina said that it had been possible for the industry to hold its own for so long under these conditions thanks to inflation "because inflation paid half the price of the car. Inflation impeded the practice of saving, and the only way for one to safeguard a modest surplus in income was to go into debt by buying on credit," the newspaper said.

Pre-shipment finance

FINANCIAL TIMES REPORTER

THE LONDON Chamber of Commerce and Industry is organising a seminar on pre-shipment finance on Wednesday, March 22, aimed at helping small and medium-sized companies. According to the Chamber, problems connected with pre-shipment finance are one of the greatest worries for smaller companies going into the export field.

The seminar is to be chaired by Mr. John Boisseau of Tennant Guaranty who is Chairman of the British Export Houses Association's export finance houses committee and the speakers will include Mr. R. Froome, group adviser to Barclay's Bank International, Mr. M. A. Maberly, marketing director of Credit Factoring and Mr. T. K. Bridgnan, a director of the Credit Insurance Association.

Emirtel switches to SPC system

By John Lloyd

THE GOVERNMENT of the United Arab Emirates is to put out a contract for a number of electronic, computer-controlled telephone exchanges to international tender.

The decision was taken at a Board meeting of Emirtel, the UAE telecommunications authority, last week. The Board approved a budget for 1978 of over £100m. (740m. dirhams).

At present, Emirtel relies largely on semi-electronic Pentex exchanges, supplied by *Plessey* However, the authority has recently taken delivery of two small fully electronic exchanges from NEC of Japan at what was described as "highly competitive" prices.

Emirtel's general manager, Mr. Geoffrey Downer, said over the week-end that the authority had decided to install the most modern equipment presently available on the world markets. This means going over to the stored programme control exchanges (SPC), which no U.K. company manufactures at present.

Emirtel plans to increase its present 52,000 lines to 124,000 lines by the end of this year. By 1981, it plans to have a capacity of 300,000 lines.

Mr. Downer said that the company was looking for "proven SPC exchange equipment," which would bring Emirtel's network up to the highest international standards by the early 1980s.

He confirmed that the extension of the system would be kept under Emirtel control, and that contracts would be awarded for the various parts of the network bit by bit.

The decision to move beyond *the U.K.-made Pentex equipment* —which is a modified version of the TXE4 exchanges manufactured for the Post Office—highlights the present weakness of the British telecommunications suppliers in the richest markets of the developing world. System X, the SPC exchange currently being developed by the Post Office and by Plessey, GEC and STC, will not be available for export until the early 1980s on the most optimistic forecasts.

TRACTS

Chem has been awarded act by Jugovinil for the and supply of equipment PVC plant to be built at Sucurac, Yugoslavia. The nstalled cost including y components will be 40m. Export credit for the t has been arranged by l Bank supported by the Credits Guarantee Depart-

lyssen Henschel has a DM.60m. order for 29 locomotives from the Egyptian railway authorities, ten of which should be delivered by the end of this year.

- BTR's American subsidiary, Permali, has won a $4.25m. contract to supply wind-tunnel fan blades to the National Aeronautics and Space Administration.
- Societe Azote et Produits Chimiques, a subsidiary of CDF Chimie, has been awarded a Frs.23m. contract to build a plant in South Africa for the production of purified sodium phosphates, scheduled to be operative in 1980.

World Economic Indicators

INDUSTRIAL PRODUCTION: 1970=100

					% change on year
	Dec. '77	Nov. '77	Oct. '77	Dec. '76	
	113.2	124.5	128.1	129.8	−12.7
	129.0	125.0	126.0	131.0	− 1.5
rmany	115.3	124.9	120.5	109.9	+ 4.9
Kingdom	102.1	101.3	101.2	103.2	− 1.0
	123.0	127.0	122.0	125.0	− 1.6
States	133.2	133.3	132.8	126.7	+ 5.1
	Oct. '77	Sept. '77	Aug. '77	Oct. '76	
	118.0	118.3	108.7	124.2	− 5.0
	Sept. '77	Aug. '77	July '77	Sept. '76	
	130.2	129.2	128.0	126.7	+ 2.7

Dfls. 50,000,000.—
6½% Guaranteed Bearer Notes 1972
due 1976 / 1979
of
ELECTRICITY SUPPLY COMMISSION
Johannesburg
REPUBLIC OF SOUTH AFRICA

Third annual redemption instalment
(Redemption Group No. 1 and No. 4
fell due on April 1, 1976 and
April 1, 1977 resp.)

As provided in the Terms and Conditions Redemption Group No. 3, amounting to Dfls. 12,500,000.—, has been drawn for redemption on April 1, 1978 and consequently the Note which bears number 3, and all Notes bearing a number which is 4 or a multiple of 4 plus 3, are payable as from

April 1, 1978

at

Algemene Bank Nederland N.V.
(Central Paying Agent)
Amsterdam-Rotterdam Bank N.V.
Bank Mees & Hope NV
Pierson, Heldring & Pierson N.V.
in Amsterdam;
Kredietbank S.A. Luxembourgeoise
in Luxembourg;
Crédit Commercial de France
in Paris;
Algemene Bank Nederland (Genève) S.A.
in Geneva;
Algemene Bank Nederland in der Schweiz AG
in Zurich.

February 13, 1978

China shows interest in Indian pact

By K. K. Sharma

NEW DELHI, Feb. 19.

CHINA WOULD like to conclude a long-term trade agreement with India, the Chinese trade delegation now here on a two-week visit has indicated. The matter is expected to be taken up at diplomatic level after the delegation reports back to Peking.

In discussions the team has indicated that China would trade on a balanced basis and that an agreement would help in achieving this. However, the Chinese have said they have no objection to settling deals in convertible currency.

The most promising area of collaboration is steel and iron ore and the Chinese have told India of their plans to increase imports of steel plant machinery and iron ore to quickly raise steel capacity in their country. They said that Indian ore is better suited to their needs than that imported from Australia.

A delegation of Indian businessmen is to visit China in April to follow up contacts made while the Chinese delegation has been here. This is also expected to improve political relations although this process is expected to be slow.

Pakistan to import buses

KARACHI, Feb. 19.

PAKISTAN WILL import 400 buses to meet an acute transport problem in Karachi, General Zia-ul Haq, chief martial law administrator, said that 200 buses would be imported from Britain and 100 each from Iran and Turkey.

A British expert from London Transport would be asked to study the traffic problems and recommend ways to solve them, he added.

General Zia said he told British Prime Minister James Callaghan when he visited Islamabad, last month, that Pakistan would prefer buses, rather than cash from Britain.

Reuter

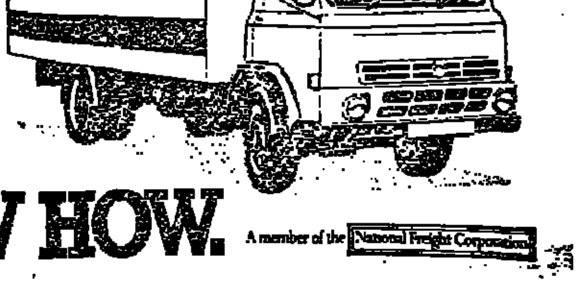
Honda in Yugoslavia

TOKYO, Feb. 19.

HONDA MOTOR said it is considering a plan to establish a joint venture in Yugoslavia to produce petrol engines for use in machines other than vehicles.

Honda said the plan was first proposed by Yugoslavia's Metalska Industrija Standard two years ago, but refused further details.

The Yugoslav company has been assembling small engines from parts supplied by Honda since 1975. It has assembled 500 engines for general use, 9,500 for agricultural machines and 1,400 engines for small generators in the first half of calendar 1977, Honda added. Reuter.



HOME NEWS

CBI to fight State pay-curb pressures

BY OUR INDUSTRIAL STAFF

THE CONFEDERATION of British Industry has set up a working party to prepare a detailed case against the Government's plan to enforce pay limits through public sector contracts. It consists of senior executives from companies with special experience of Government contracting.

As the campaign against the clauses continued. Sir Maurice Laing, president of the Federation of Civil Engineering Contractors, has written to Mr. Peter Shore. Environment Secretary, protesting that the pay guideline clauses are "totally inequitable and unworkable in many respects" and could have serious effects on the civil engineering industry.

The CBI working party is expected to present detailed arguments about why the contract clauses are unworkable when it meets civil servants sometime this week.

There are 11 members under the chairmanship of Sir John Methven, the director-general. Points they will develop include the difficulty of a main contractor vetting the pay levels of all its sub-contractors' employees. They will say this is impossible.

They will also argue that it would be illogical to expect a small sub-contractor to indemnify a major company against problems it might cause, and for a main contractor to take responsibility for its subcontractors' business affairs.

sila?

In his letter, Sir Maurice suggests the clause could be made workable if it was limited to the present phase of pay policy ending on July 31 this year "Otherwise contractors are in effect being asked to give a blank cheque to the Government."

There should be the right of appeal to an outside agent against any decision by the Secretary of State and the points to be taken into account when a decision is made to restrict remuneration or terminate the contract should be clearly specified.

The "settlements" involved should be confined to those involving a significant number of employees directly employed on the contract in question.

Moreover, contractors should not be held responsible for nominated or indirect sub-contractors, nor for a breach by a direct sub-contractor if the subcontract contains the clause, says Sir Maurice.

Municipal engineers back registration

BY KENNETH GOODING, INDUSTRIAL CORRESPONDENT

THE Institution of Municipal Engineers, with 10,000 members, has added its backing to the suggestion that there should be statutory registration for professional engineers.

In its recommendations to the Government-sponsored committee of inquiry into the engineering profession, headed by Sir Monty Finniston, the municipals say registration "would make engineers readily identifiable to the public and employers and would establish a designation which would assist individuals in their careers and identify a definite and recognisable standard of competence."

The institution suggests that a register of chartered engineers should be maintained by the Council of Engineering Institutions through its engineers' registration board.

It dismisses the idea that there should be a register under the control of an independent organisation—as proposed by the Institution of Electrical Engineers—as "a clumsy and inefficient method of undertaking the task of registration."

The municipals also support the concept of a limited form of licensing for professional engineers where the health and safety of the public are exceptionally at risk.

State training scheme for accountants

Financial Times Reporter

VERY high success rates for a Government accountancy training scheme are claimed by the Civil Service Department to-day.

Last year, Whitehall trainee accountants scored a 100 per cent. success rate in the Army Pay Corps examinations at Worthy Down near Winchester, reports the department's journal, Management Services in Government.

The training scheme, set up by the civil service to counter the problem of recruiting accountants from business and meet the shortage, has an average success rate of 80 per cent.

The "very intensive" course includes a year of postal tuition and a year of residential study for a series of examinations.

The schemes are said to "achieve the best of both worlds," because they produce professionally trained accountants, who also know their way around the public sector.

British Rail to let part of Euston offices at £3.2m.

FINANCIAL TIMES REPORTER

THE LARGEST office complex available in London, in front of Euston station, is to be let by the British Rail Property Board at £3.2m. a year.

The Euston Square complex has a total office area of 307,000 square feet, of which the British Railways Board is to take 70,000 square feet to house overspill from its Marylebone headquarters. The balance of 237,000 square feet will be rented at a rate of £13.5 per square feet.

The £30m. scheme has been under construction by Sir Robert McAlpine and Sons since 1974. It has two blocks in front of the station.

Firemen face expulsion

EIGHTEEN firemen in Northamptonshire face expulsion from the Fire Brigades Union because they worked during the nine-week strike. Their jobs are unlikely to be affected, as there is no local closed shop.

Hopes rise of drop in jobless total

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

HOPES THAT the unemployment figures for mid-February published to-morrow will show a stabilisation and possibly a decline in the total have increased after the guarded optimism of Mr. Denis Healey, Chancellor of the Exchequer, last week.

In a speech on Friday, Mr. Healey suggested that "it could be that unemployment has already peaked." He said there were indications that unemployment, which has been declining in Great Britain since the late summer, was still falling and that notified vacancies were still rising.

The Chancellor emphasised the increased uncertainty about the relationship between unemployment and output but maintained that if the rate of economic growth was above 3 per cent. this year, a steadily declining unemployment trend should be firmly established in the course of the year.

Although there was a slight rise in the U.K. jobless total in the month to mid-January because of a sharp increase in Northern Ireland, the figure for Great Britain fell, as it has in the previous three months.

In the U.K. the number of adults out of work last month was 1.43m., seasonally adjusted, which is equivalent to 6 per cent. of the workforce. This was 90,200 higher than a year earlier.

Moreover, the number of notified vacancies has been rising sharply and at 182,800 last month was at its highest level since March, 1975.

Significant

The other main economic indication this week is the provisional estimates for capital spending and stocks in the fourth quarter. The investment figures will be examined to see if the 13 per cent. rise in private sector manufacturing expenditure in the first nine months of last year, compared with the same period of 1976, has been sustained.

The stock figures are significant after the large involuntary stockbuilding of the first half of last year. The recent industrial production figures suggest that there may have been some rundown in the level of *stockholdings in the autumn.*

Both these estimates are expected on Thursday, while the preliminary estimate for Gross Domestic Product based on output data for the fourth quarter is due to be published this afternoon.

This is likely to show that the economy grew by a negligible amount last year.

Top tax indexation would cost less than 1 per cent.

BY PETER RIDDELL, ECONOMICS CORRESPONDENT

THE TOTAL yield to the Government from income tax would be reduced by less than 1 per cent. if the level of the higher rate bands was adjusted to take account of the current rate of inflation

This is disclosed by the Treasury in a lengthy Commons written answer from Mr. Robert Sheldon, Financial Secretary, on the estimated cost of various tax and economic changes.

Indexation of the higher rate bands to take account of inflation has long been urged both by Conservative spokesmen and by various business and management groups.

According to the last Budget estimate of the total expected income tax yield, adoption of this change would have meant a revenue loss of less than £180m. in 1977-1978.

Writing to Mr. Norman Lamont, Tory M.P. for Kingston-upon-Thames and a party spokesman on industry, Mr Sheldon disclosed that, with an inflation rate of 10 per cent., for example, indexation of personal allowances would reduce the yield from income tax by about 5 per cent. This amounts to roughly £900m. on the same basis as above.

An increase in specific duties —notably on alcohol, tobacco and petrol—of 10 per cent. would add roughly 4 per cent. to the yield of central government indirect taxes. This would be an estimated £500m. on 1977-78 yields.

Such a move has been suggested as a means of offsetting the revenue loss from income tax cuts in the Budget.

Mr. Sheldon also disclosed that a rise in prices of 10 per cent. would, if reflected in a similar increase in money incomes and profits, lead to roughly a 13 per cent. rise in total tax revenue.

Complaint against FT rejected

COMPLAINTS by Mr. John Devine, president of the National Union of Journalists, against the Financial Times, The Guardian and the Daily Telegraph have been rejected by the Press Council.

Mr. Devine contended there was an onus on the newspapers to have balanced their reporting of a Westminster Press management statement on the Darlington dispute by publishing an NUJ statement issued on the same day. Alternatively he thought they should have published his letter to set the record straight.

Reports in all three newspapers were similar: talks the previous day between the NUJ and Westminster Press to resolve the closed shop dispute at Darlington had broken down. Reasons for the breakdown were explained. Each gave the management view, and quoted a Westminster Press statement

Mr. Devine's long letter to each of the editors criticised in strong terms their "suppression" of a statement by the NUJ, issued to the Press Association. None of the newspapers published the letter.

Mr. M. H. Fisher, editor of the Financial Times, told the council that his reporter had tried a number of times to make contact with the NUJ. Eventually Mr. Ken Morgan, then general secretary, returned the call, and had a general off-the-record talk about Darlington. He told the newspaper that an official NUJ statement would be going out through the P.A.

Mr. Fisher said the statement did not run until after the labour staff had left the office, and said he had been advised that Mr. Devine's letter was "seriously defamatory." It was privately acknowledged.

The following day the Financial Times published a statement by Lord Gibson on the Darlington dispute and gave Mr. Morgan an opportunity to comment. The Editor said Mr Morgan made the points Mr. Devine had made in his letter, but without being defamatory.

Mr. K. G. Dodd, executive editor of The Guardian, said in his paper's view Mr. Devine's letter was over-long. Mr William Deedes, Editor of The Daily Telegraph, said a quote from a local NUJ spokesman appeared in more than one million copies of the London and Manchester editions. He said he considered Mr. Devine's letter very long and it would mystify a high *proportion of his readership.*

The Press Council's adjudication was:

Unfortunately the NUJ statement was not available in time for the newspapers to include it in their general editions as part of the original story, and the circular letter that Mr. Devine wrote was couched in such terms that the editors were entitled to say they would not publish it. The complaints against the Financial Times, The Guardian, and the Daily Telegraph are rejected.

This week in Parliament

TO-DAY

COMMONS — Second Reading of the House Purchase Assistance and Housing Corporation Bill, and of the Employment Subsidies Bill

SELECT COMMITTEE: Expenditure. Education, Arts and Home Office sub-committee. Subject: *Reduction of Pressure on the Prison System.* Witness: Sir Louis Petch, chairman of the Parole Board (4.15 p.m., Room 15).

TO-MORROW

COMMONS—Debate on Opposition motion on taxation. Debate on the seventh report of the House of Commons Services Committee Session 1976-77 on Members' Secretaries and Research Assistants.

LORDS — Participation Agreements Bill, *third reading.* Suppression of Terrorism Bill, committee. Shipbuilding (Redundancy Payments) Bill, second reading. Debate on disarmament.

SELECT COMMITTEES. Nationalised Industries. Sub-committee A. Subject: British Rail Report and Accounts. Witnesses: British Rail (4 p.m., Room 8). **Science and Technology.** General Purposes sub-committee. Subject: Durability and efficiency of discharge lamps. Witness: Mr. I. D. M. Meiklejohn (5 p.m., Room 16).

WEDNESDAY

COMMONS — Scotland Bill, third reading.

LORDS—Debate on Profit Sharing. Debate on the report of the working group on the Library

SELECT COMMITTEES: Nationalised Industries. Sub-committee B. Subject: Central Electricity Generating Board and Accounts. Witnesses: CEGB (10.45 a.m., Room 8). **Expenditure.** Social Services and Employment sub-committee. Subject: Employment and Training. Witnesses: Assocn. of Municipal Authorities, Assocn. of County Councils; Assocn. of District Councils (4.30 p.m., Room 16). **Science and Technology.** Witnesses: Mrs. Shirley Williams, Education Secretary, and Mr Gordon Oakes, Minister of State (5 p.m., Room 15)

THURSDAY

COMMONS — *Debate on developments in the European Communities July-December, 1977.* Second reading of the Commonwealth Development Corporation Bill (Lords) and of the Northern Ireland (Emergency Provisions) Bill (Lords). Motion on EEC Document on Conflict of Laws on Employment Relationships in the Community.

LORDS—Theft Bill, report. Blasphemy (Abolition of Offence) Bill

FRIDAY

COMMONS — Private Members Bills.

National Savings bring in £194.7m.

By Adrienne Gleeson

STABLE interest rates offered by National Savings when returns elsewhere were fluctuat*ing were reflected in January's* net receipts. On the new basis which excludes the Trustee Savings Banks, they amounted to £194.7m.

Total funds administered by the Department for National Savings amounted to £9.74bn. at the end of the month — more than £2bn. higher than the total at the corresponding period last year.

Most of the increase comes from the influx of funds into the National Savings Bank's investment accounts last summer —an influx which was cut back when the department imposed a £50,000 limit on individual accounts in an attempt to deter institutional investors.

Recently, however, the inflow of funds into other forms of National Savings has improved. The January figures, in particular, show a big increase in deposits placed in ordinary accounts with the month's £28.7m. net deposits the best for thirty years.

The upsurge, which the department attributes to the fact that the first £70 of interest on an ordinary account is tax free, takes total inflow into NSB ordinary accounts during the first 45 weeks of the current financial year to £51.5m. In the first 10 months of the 1976-77 financial year, there was a net outflow of £50.6m.

The high interest rate offered by the NSB's investment accounts—9 per cent. until the end of this month—has continued to attract a high level of deposits, though net receipts of £47.4m. during January fell well short of the inflow in the middle of last year.

British Savings Bonds, which offer a return of 8½ per cent., have also attracted investors, and net receipts of £18.7m in January were the highest since June 1972.

PAUL CHEESERIGHT reports on the odd ownership problems surrounding Hemerdon Mining

Attempt to unearth the grubstakers

FORTY BROWN shopping bags stuffed with documents, seized by the Ontario Securities Commission, could provide the vital clues for deciding who owns the company working on what could become the biggest U.K. metal mining project this century.

The company is Hemerdon Mining and Smelting, which is registered in Bermuda, but backed largely by Canadian and U.S. money. Its mining prospect is the tungsten-tin-china clay property at Hemerdon Ball, outside Plymouth.

The problem is that those who put up the money have not received formal proof of share ownership. This has led to legal wrangles involving Mr. W. A. (Billy) Richardson, who first promoted the company, and those who provided cash for the company—the grubstakers.

An intriguing side to Canadian law has been highlighted in connection with the case of Hemerdon. The origins of the present situation lie in a provision of Ontario law.

Investigation

Harking back a century when individuals would provide funds for a minerals prospector—grubstake him—the law provides that registration is not required when securities are sold by prospectors to finance a prospecting expedition.

In Mr. Richardson's case the prospecting expeditions centred on Hemerdon Ball and Parys Mountain in Anglesey. The Ontario Securities Commission said at the weekend that it was conducting an investigation into the application of the law to this case.

It was trying to establish from the documents the identity of all the grubstakers.

The 40 paper bags were seized from Mr. Richardson last month by the Commission, which has power of seizure but not of search. Accountants are examining every document—"a fantastic job," the Commission said, indicating that the work would take months rather than weeks.

There are 5m. Hemerdon shares in issue. Of this total 1m. are held by Mr. Richardson, while the rest are held in trust by a Bermuda bank. Only when ownership is settled and a distribution has taken place will the company be able to go ahead with its plans for over-the-counter trading in the U.S. and an eventual listing in London.

Estimates vary

Mr. Richardson apparently has a list of the shareholders but so far has not handed it over to the company. Since the end of 1975 he has in any case been at odds with the present management who wrested control of the company from him at that time.

Estimates of the amount of money invested in Hemerdon over about 15 years while it was under Mr. Richardson's control vary but average out at between $3m. and $4m. Mr. Carl Schwarzwalder, the present chairman of the company, put up $150,000.

A list of grubstakers compiled by *Mr. Schwarzwalder,* and another put together by Mr. Theodore Belman, a Toronto lawyer, contain about 1,000 names, mostly from Ontario. Both Mr. Schwarzwalder and Mr. Belman want Mr. Richardson's list but are acting independently.

A Canadian court has appointed Dunwoody Ltd. as trustee to act for the grubstakers, but as the shares are in Bermuda, its power is clearly limited.

However the company itself, is not the subject of any litigation. Indeed last December it announced a joint venture with Amax, a U.S. mining house, to explore Hemerdon Ball in detail.

Businessman's Diary

U.K. TRADE FAIRS AND EXHIBITIONS

Date	Title	Venue
Current	International Knitwear Fair (cl. Feb. 23)	Earls Court
Current	Int. Men's & Boys' Wear Exbn. (cl. Feb. 23)	Earls Court
To-day	Spring Floorcoverings Exhibition (cl. Feb. 23)	Metropole Centre, Brighton
To-day	Furniture Production Exhibition (cl. Feb. 24)	Nat. Exbn. Centre, B'ham.
Feb. 21—23	British Growers Look Ahead Exbn. and Conf.	Harrogate
Mar. 5—10	Oceanological Equip. & Services Exbn.	Metropole Centre, Brighton
Mar. 6—9	National Carpet Fair	Blackpool
Mar. 7—April 1 ...	Daily Mail Ideal Home Exhibition	Olympia
Mar. 12—15	London Young Fashion Fair	Earls Court
Mar. 13—17	International Electrical Exhibition	Nat. Exbn. Centre, B'ham.
Mar. 13—17	International Pneumatics & Hydraulics Exbn.	Nat. Exbn. Centre, B'ham.
Mar. 13—17	Int. Instruments, Electronics & Automation Exbn.	Nat. Exbn. Centre, B'ham.
Mar. 14—16	Int. Public Address Equipment Exbn.	Cunard Int. Hotel, W.6
Mar. 16—17	Vending Equipment, Refreshment Services Exbn.	Cumberland Hotel, W.1

OVERSEAS TRADE FAIRS AND EXHIBITIONS

Feb. 21—24	Offshore South-East Asia Show	Singapore
Feb. 26—Mar. 2...	International Spring Fair	Frankfurt
Feb. 26—Mar. 4 ..	Middle East Transport Exbn. and Conf.	Dubai
Feb. 28—Mar. 3...	Int. Tunnelling Industries Exbn. & Conf.	Basle
Mar. 2—12	International Motor Show	Geneva
Mar. 5—8	European Fashion Fair	New York
Mar. 5—12	International Agricultural Exhibition	Paris
Mar. 6—11	British Industrial Exhibition	Kowloon
Mar. 6—12	International Audio Exhibition	Paris
Mar. 7—10	Powder Technology & Bulk Solids Exbn.	Basle
Mar. 8—12	Int. Oil & Gas Heating Exhibition	Stuttgart
Mar. 12—14	International Shoe Fair	Utrecht
Mar. 12—19	International Spring Fair	Leipzig
Mar. 14—18	Int. Printing & Paper Industry Fair	Zagreb
Mar. 15—18	International Building Exhibition	Singapore

BUSINESS AND MANAGEMENT CONFERENCES

Feb 21	*Henley Centre for Forecasting: The Future of the* U.K. Property Markets	Bowater Cinema, S.W.1
Feb. 21	British Council of Productivity Associations: Office Productivity—Microfilm	Metropole Hotel, W.2
Feb. 21—24	Bradford Univ.: Financial Control of R & D	Bradford
Feb. 22	Institute of Personnel Management: Employment Law in 1978	Manchester
Feb. 22—23	Financial Times: Business with Spain	Madrid
Feb. 23—24	European Study Conferences: EEC Competition Law	Royal Lancaster Hotel, W 2
Feb. 24	Thames Polytechnic: *Business Trends in France*	Dartford
Feb. 26—Mar. 2...	British Transport Staff College: Finance & Accounting for Management	Woking
Feb. 27—Mar. 2...	ICA: Personal Income Tax course	Grand Htl., Eastbourne
Feb. 27—Mar. 3...	London Chamber of Commerce & Industry: Understanding the Arab World	69, Cannon St., E.C.4
Feb. 27—Mar. 10..	*P-E Consulting Group: Production Engineering*	*Training Centre, Egham*
Feb. 27—28	Financial Times, The Banker, Investors Chronicle: World Banking in 1978	Grosvenor House, W.1
Feb. 27—Mar. 1...	AMR International: Creating Business Growth in Europe	Royal Westminster Htl., S.W 1
Feb. 28	Institute of *Directors Annual Convention:* The State & the Individual	Royal Albert Hall, S.W.7
Feb. 28	Executant: Weights & Measures	Russell Hotel, W.C.1
Feb. 28	Inbucon Group: National Policy and Pay Restructuring	Dorchester Hotel, W.1
Mar. 1	Int. Assoc. for Students of Economics & Management: Business Education Seminar	Birmingham
Mar. 1—2	Investment & Property Studies: Design Liability in the Construction Industry	Royal Lancaster Hotel, W.2
Mar. 2	McGraw-Hill: Corporate Fraud	Royal Garden Hotel, W.8
Mar. 6—8	World Re-cycling Conference	Basle
Mar. 6—10	Urwick: *Project Management*	Slough
Mar 6—10	Department of Industry: Flow Measurement	Glasgow
Mar 7—8	Lenofern: Cost-Eff. Print in Marketing	Inst. Marine Eng., E.C.3
Mar. 8	Henley Centre for Forecasting: Forecasts for the U.K. Leisure Markets to 1983	Carlton Tower Hotel, S.W.1
Mar. 9	Confederation of British Industry: Nigeria 1978	21, Tothill St., S.W.1
Mar. 13	College for the Distributive Trades: Inflation Accounting	30, Leicester Square, W.C.2
Mar. 13—14	State of the Art: Technical Marketing Conference	Royal Garden Hotel, W.8
Mar. 13—17	Kepner Tregoe: Decision Making for Senior Management	Hartley Wintney
Mar. 14	Building Advisory Service (BAS): Arbitration of Building Disputes	Cavendish Conf. Centre, W.1
Mar. 14	Anthony Skinner: The Detection and Prevention of Fraud	Piccadilly Hotel, W.1
Mar. 15	Institute of Credit Management National Conf.	Hilton Hotel, W.1
Mar. 15	Centre for Interfirm Comparison: Management Ratios and Interfirm Comparison	Management House, W.C.2
Mar 15—17	Keith Shipton Developments: Marine Risk Management	Royal Garden Hotel, W.8
Mar. 16	Investment & Property Studies: Corporate Credit Risk Assessment	Press Centre, E.C.4
Mar. 20—22	Resources Policy: The Economics, Politics & Social Implications of Resource Use & Conservation	Oxford
Mar. 22	London Chamber of Commerce & Industry: Pre-Shipment Finance for Small & Medium Sized Firms	69, Cannon St., E.C.4
Mar 21	Gresham Management Services: Employee Participation in the Retail & Distributive Industries	Hyde Park Hotel, S.W.1

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LABOUR NEWS

Shipbuilding association may be recognised soon

BY ALAN PIKE, LABOUR CORRESPONDENT

MBERS of the British Ship- lders Board will be faced in with the highly-sensitive stion of recognition of the building and Allied Indus- s Management Association n they meet on Thursday.

ecognition of the manage- it association is being resisted ngly by the Confederation of building and Engineering ons and the full TUC general icil and, although it has been ve issue since before the onalisation of the industry, Board has deferred a final sion. Union leaders believe, ever, that this may come e soon.

December, the Board put off a recognition decision until it had approached the Advisory, Conciliation and Arbitration Service. These discussions have taken place.

When they meet on Thursday, Board members will have before them a recent letter written on behalf of the TUC general council by Mr. Len Murray, general secretary, to Mr. Michael Casey, chief executive of British Shipbuilders.

This expresses concern that the Board has not come to a conclusion on the issue and says that "an early decision not to recognise the management association is essential in the interests of good industrial relations in the industry." The TUC, says Mr. Murray, firmly maintains that the proliferation of unions should be avoided, with recognition of staff grades restricted to confederation-affiliated unions already in shipbuilding.

The management association is part of the Engineers' and Managers' Association, which is in the TUC but is not affiliated to the confederation. The association's members are banning overtime in protest against delays by British Shipbuilders in reaching a recognition decision. Members of confederation unions have been instructed to ignore the ban

Offshore recruitment dispute averted

Y OUR OWN CORRESPONDENT

TENTIALLY damaging dis- over offshore recruitment been averted between the sh Seafarers' Joint Council the Aberdeen-based Inter- n Offshore-Oil Committee.

e two multi-union group's, senting largely the same unions, came into conflict over which one should organise semi-subersibles.

The Department of Energy and offshore employers were concerned over the two organisations competing for the same class of offshore vessel.

A compromise solution now allows the joint council, which has agreements covering 13 semi-submersibles and drill-ships, to keep all semi-submersibles under its sphere of influence other than those being used as permanent production platforms.

The only other exception made by the inter-union committee is the semi-submersible Stadrill, already organised by the Abeerdeen office of the TGWU through the committee.

The committee will also recognise the priority of the Seafarers' Joint Council over drill-ships and pipe-laying barges.

Ford strike ends after six weeks

By Our Labour Staff

FORD's HALEWOOD plant in Liverpool should be back in production to-day for the first time in six weeks, after the unanimous decision by a mass meeting of workers at the weekend to end their strike over work schedules.

The stoppage by 1,000 press-shop workers caused 9,000 others to be laid off in the factory's car body, assembly and transmission sections. Production at the Transit van plant in Southampton was also hit.

The strike—the longest internal dispute in Halewood's 15-year history—is estimated to have lost Ford about £60m.-worth of vehicles at showroom prices.

The breakthrough in the dispute came late last week when agreement was reached on continuing hourly job rotation for heavy work in return for a guarantee of increased productivity.

Airports policy talks

THE GOVERNMENT'S White Paper on future airports policy is expected to come under discussion when Mr. Stanley Clinton Davies, Under-Secretary of Trade, addresses a symposium organised by the Royal Aeronautical Society on Wednesday.

Mr. Neville Ledsome, the officer at the Department of Trade primarily responsible for the White Paper, will also speak at the meeting.

EEK'S FINANCIAL DIARY

he following is a record of the principal business and financial gements during the week. The Board meetings are mainly he purpose of considering dividends and official indications ot always available whether dividends concerned are interims als. The sub-divisions shown below are based mainly on last timetable.

TO-DAY
PANY MEETING—
n, Birmingham, 12
RD MEETINGS—
s:
Commercial Inv.
nel
ims:
r Industry Inv.
rods
e

Developments
Knitting
(Joseph)
DEND & INTEREST PAYMENTS—
ted Dairies 0.45p
tail and Gen. Tst. Ord. and A Ord.
(inc. supp. distbn. of 0.115p
ended 31/3/77)
1.1305p
and Welch 6.7466p
G. Recovery Fd. Inc. Units 0.8p
(Scarborough) 4.8p
TO-MORROW
PANY MEETINGS—
ean, Abercorn Rooms, E.C., 12
(Frederick W.) Edgbaston,
gham, 12.15
am Brick, Nottingham, 12
Reo.) Organisation, Renfrew, 3.
D MEETINGS—
ecurities
Enkalon
Venture Corp.
Inv. Trust
Inv. Trust
(Great Britain)
Services
ast and Texas Regional Inv. Tst.
m:
Car Auction
END & INTEREST PAYMENTS—
ean 2.21835p
ld-Harvey 1.125p
8pcPf. 2.8pc
House 1.1p
and New York Tst. Dbs. 2 2½pc
rederick W.) 0.533p
tillers 2.4375p
Bank Float. Rate Cap. Note Issue 1¼pc
10pc 1992 £2.64
p
EDNESDAY, FEBRUARY 22
ANY MEETINGS—
eet Fabrics, Leicester, 11
de Properties, Winchester House, 1.05
China Clays, Hyde Park Hotel, 12.30
ndries, Derby, 12
sdale, Basingstoke, 12.45
tone, Newport, Isle of Wight,

D MEETINGS—
n Viyella
n Holdings
s:
perties
Corp.
ND & INTEREST PAYMENTS—
pcBds. Red. 22/2/78 £6.2618
12¼pcBds. Red. 22/2/78 £6.2618
2¼pcBds. Red. 22/2/78 £6.2618
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orpeth 12¼pcBds. Red. 22/2/78
12¼pcBds. Red. 22/2/78 £6.2618
12¼pcBds. Red. 22/2/78 £6.2618
-Street 12¼pcBds. Red. 22/2/78
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2¼pcBds. Red. 22/2/78 £6.2618
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12¼pcBds. Red. 22/2/78
nt Agency and Music 3.66p
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ND & INTEREST PAYMENTS—
ugh 12¼pcBds. Red. 22/2/78
ley 12¼pcBds. Red. 22/2/78
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tshire 12¼pcBds. Red. 22/2/78
12¼pcBds. Red. 22/2/78
12¼pcBds. Red. 22/2/78
Brick 7.7p
oating Rate £4.09375
¼pcBds. Red. 22/2/78 £6.2618
¼pcBds. Red. 22/2/78 £6.2618
ereforashire 12¼pcBds. Red. £6.2618

Southampton 12¼pcBds. Red. 22/2/78 £6.2618
Stirling 12¼pcBds. Red. 22/2/78 £6.2618
Test Valley 12¼pcBds. Red. 22/2/78 £6.2618
Three Rivers 12¼pcBds. Red. 22/2/78 £6.2618
Tunbridge Wells 12¼pcBds. Red. 22/2/78 £6.2618
Vectis Stone 0.884p

THURSDAY, FEBRUARY 23
COMPANY MEETINGS—
Caplan Profile, Winchester House, E.C. 11
Charterhouse, Abercorn Rooms, E.C., 12
BOARD MEETINGS—
Finals:
Allied Insulators
Barclays Bank
Beresfords
Cardinal Inv. Trust
Hoover
Imperial Chemical Industries
Lancashire and London Inv. Trust
Ratcliffe (Great Bridge)
Squirrel Horn
Westwood Dawes
Interims:
Abercom Inv.
Commercial Bank of Australia
Estates Property Inv.
Johnson and Firth Brown
Neepsend
Smith Bros.
DIVIDEND & INTEREST PAYMENTS—
Batley's of Yorkshire 1p
Clydesdale Trans. Collieries 6 cts.
Coventry 13½pcBds. Red. 17/2/82 6¾pc
Dover 12¾pcBds. Red. 21/2/79 6⅜pc
Forminster 2.0724p
Griqualand Expltn. and Finance 14.71773p
M. and G. 2.084p
McCorquodale 9.74p
Trans-Natal Coal Corp. 8 cts.
Victoria Carpets 0.4375p

FRIDAY, FEBRUARY 24
COMPANY MEETINGS—
C.G.S.B., Newcastle upon Tyne, 2.30
French (Thomas), Manchester, 12.30
Grange Trust, 70, Finsbury Pavement E.C., 12.30
Lowe (Robert H.), Cheshire, 12
Raeburn Invest. Trust, 21, Moorfields, E.C., 2.30
Turner Manufacturing, Wolverhampton, 12.30
Ward (Thomas W.), Sheffield, 3
Wearra, Kettering, Northants, 12
Willoughby's, Cheapside House, E.C., 12
BOARD MEETINGS—
Interims:
Austin (F.) (Leyton)
Telefusion
DIVIDEND & INTEREST PAYMENTS—
Allerdale 8⅛pcBds. Red. 30/8/78 4 1/16pc
Anston 16/12/77 0.75p
Associated Tooling 1.7p
Baker Intl. 16 cts.
Berkshire 7¼pc Red. 78-79 3⅝pc
Blaenau Gwent 11pcBds. Red. 20/8/80 5½pc
Breckland 12⅛pcBds. Red. 18/8/82 6 1/16pc
Caplan Profile 3.292p
Charterhouse 2.176p
Coalite and Chemical Ord. 0.015p (inc. supp. distbn. for yr. ended 31/3/77)
Compair 2.1221p
Coventry 8⅛pcBds. Red. 30/8/78 4 1/16pc
Danae Invest. Tst. Inc. shs. 1.35p
Distillers 2.695p
Durham 11⅞pcBds. Red. 19/8/81 5 15/16pc
Dyfed 8⅛pcBds. Red. 30/8/78 4 1/16pc
Eaton Corp. 56.25 cts.
Energy Services and Electronics 0.1p
Ever Ready Ln. 3pc
Forest Heath 8⅛pcBds. Red. 30/8/78 4 1/16pc
Geevor Tin Mines 8.415p
Greater London 8⅛pcBds. Red. 30/8/78 4 1/16pc
Hereford and Worcester 8⅛pcBds. Red. 30/8/78 4 1/16pc
Hillingdon 8⅛pcBds. Red. 30/8/78 4 1/16pc
Kensington and Chelsea 9⅞pcBds. Red. 22/8/79 4 15/16pc
Lee (Arthur) 1.05p
Letraset Intl. 0.897p
Lincolnshire 8⅛pcBds. Red. 30/8/78 4 1/16pc
Liverpool 8⅛pcBds. Red. 30/8/78 4 1/16pc
Lothian 9⅞pcBds. Red. 22/8/79 4 15/16pc
Manson Finance Trust 1.5p
Northampton 8⅛pcBds. Red. 30/8/78 4 1/16pc
Northern Foods 2.1p
Preseli 8⅛pcBds. Red. 30/8/78 4 1/16pc
Royal Bank of Canada 36.5 cts.
St. Albans 8⅛pcBds. Red. 30/8/78 4 1/16pc
St. Helens 11pcBds. Red. 20/8/78 5½pc
Sommervile (Wm.) 0.5p
South Herefordshire 9⅞pcBds. Red. 22/8/79 4 15/16pc
South Northamptonshire 8⅛pcBds. Red. 30/8/78 4 1/16pc
South Pembrokeshire 8⅛pcBds. Red. 30/8/78 4 1/16pc
South Ribble 9⅞pcBds. Red. 22/8/79 4 15/16pc
Stoke-on-Trent 8⅛pcBds. Red. 30/8/78 4 1/16pc
Tewkesbury 8⅛pcBds. Red. 30/8/78 4 1/16pc
Three Rivers 8⅛pcBds. Red. 30/8/78 4 1/16pc
Utico Pfs. 3¼ and 4pc
Walsall 8⅛pcBds. Red. 30/8/78 4 1/16pc
Wearra 0.9p
Williams and Glyn's Bank Fltng. Rate Cap. Notes 1984 $35.78
Worthington (A. J.) 0.307p

SATURDAY, FEBRUARY 25
DIVIDEND & INTEREST PAYMENTS—
British Petroleum 8r. Bds. 78-87 3pc
Mid-Southern Water 3.5pc (fmly. 5pc) Cons. Ord. 1.75pc
Ranks Hovis McDougall Lns. 4 1/16 and 4 [illegible]pc

ITRACTS AND DERS

DON BOROUGH OF HILLINGDON

OCAL LOTTERIES

accordance with the s and Amusement Acts, te tenders from persons ed in operating a Lottery half of the Borough

ers should be made on uncil's Form of Tender an be obtained from the ecutive, London Borough ingdon, Civic Centre, e, Middlesex UB8 1UW n the completed tenders be returned in a plain nvelope marked 'Tender l Lottery,' not later than Tuesday, 28th February, lephone Uxbridge 50111 3 for tender form. Terms tance are subject to the s normal terms and con-

George Hooper
Chief Executive

ntre,
e, Middx. UB8 1UW

REPUBLIC OF NIGER
Ministry of Public Works
Transport and Town Planning
Office of Public Works and
Town Planning
Equipment Division

FINANCING

1 IDA Loan Agreement 612/NIR of March 5, 1976.
2 Badea Loan Agreement of June 28, 1976.
3 B.N. 1977—458-5-03.

NOTICE OF INVITATION TO TENDER NO. 77/52 OF SEPTEMBER 15, 1977 SUPPLIES OF HIGHWAY MAINTENANCE EQUIPMENT TO NIGER

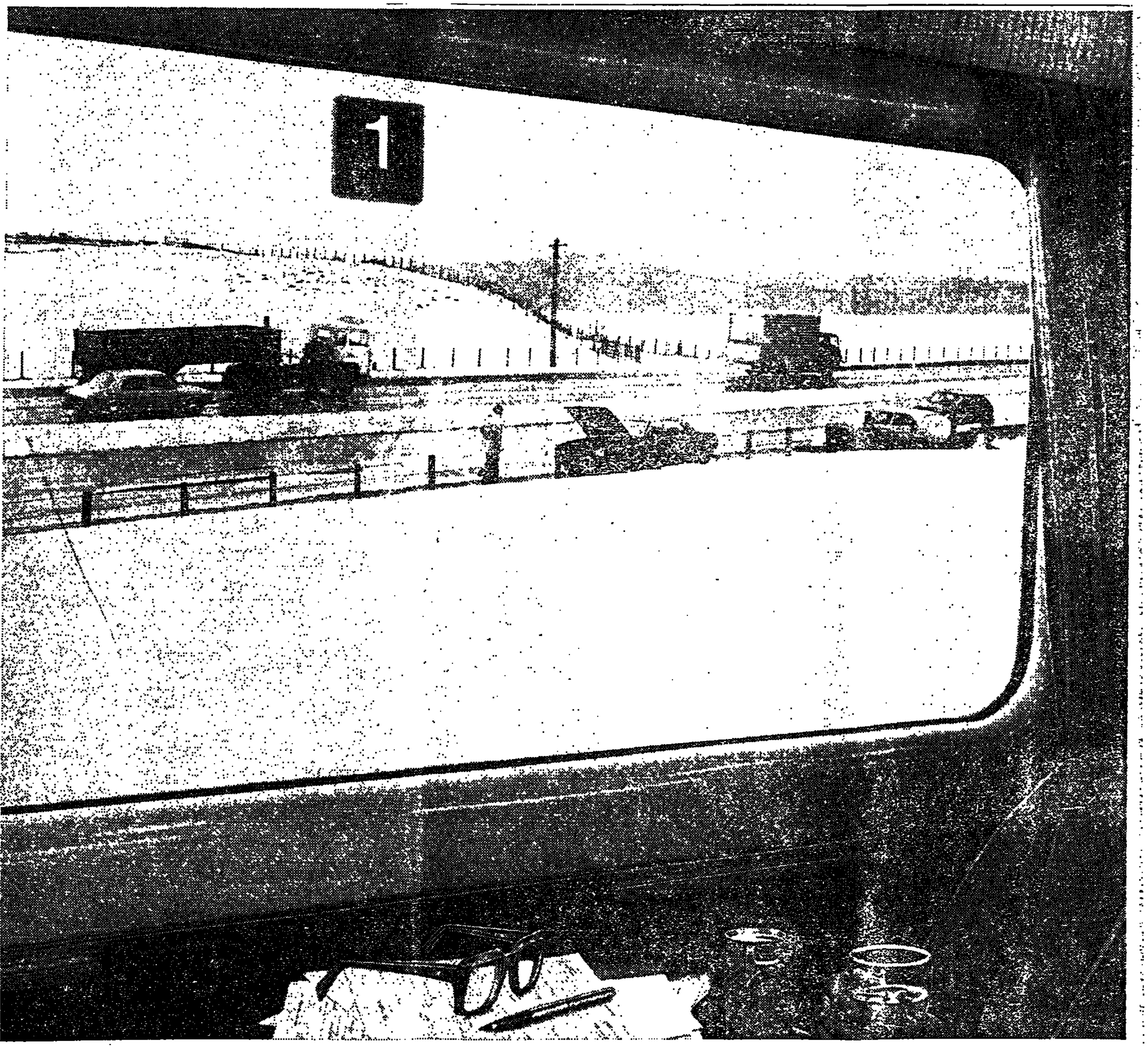
CORRECTION

The complete sets of tender documents will be sent following a request transmitted to the Office of Public Works and Town Planning, B.P. 235 NIAMEY (Republic of Niger), against the payment of the amount of TWENTY THOUSAND CFA FRANCS (20,000 CFA F.), and not 200 000 CFA F. as stated in the initial invitation to tender, by a bank check made out in the name of the "Tresorier General du Niger" in Niamey.

Submission of the tenders should be made to Niamey, Office of Public Works and Town Planning, by March 16, 1978, prior to 1800 hours local time, instead of February 17, 1978, as stated in the initial invitation to tender.

The opening of the tenders will take place on March 17, 1978, at 0900 local time, instead of on February 18, 1978, local time.

The remainder stays unchanged.



COMPANY NOTICES

GM

DIVIDEND DECLARATION

GENERAL MOTORS CORPORATION

Notice to Authorised Depositaries and to owners of
BEARER DEPOSITARY RECEIPTS
Representing units of one twentieth of a deposited share of Common Stock

NOTICE IS HEREBY GIVEN that resulting from the Corporation's Declaration of a DIVIDEND of $1.00 (gross) per share of the Common Stock of the Corporation payable on 10th March, 1978, there will become due in respect of BEARER DEPOSITARY RECEIPTS a gross distribution of 5 cents per unit.

The Depositary will give further NOTICE of the STERLING EQUIVALENT of the net distribution per UNIT payable on and after 15th March, 1978.

CLAIM FORMS for completion by Authorised Depositaries only are now obtainable from Barclays Bank Limited (as below) and may be lodged forthwith.

THE CORPORATION'S ANNUAL REPORT FOR 1977. Authorised Depositaries are assisting in the distribution of this report to holders of Bearer Depositary Receipts. Copies may also be obtained from Barclay's Bank Limited.

Barclays Bank Limited,
Securities Services Department,
54 Lombard Street,
EC3P 3AH.

CITY OF HELSINKI

10% 1975/1983 UA18,000,000

Notice is hereby given to Bondholders that, during the twelve-month period ending January 30, 1978, no Bonds have been purchased.

Outstanding amount: UA 18,000,000.

The Fiscal Agent,
KREDIETBANK S.A.
Luxembourgeoise.

Luxembourg, February 20, 1978.

CADBURY SCHWEPPES OVERSEAS LIMITED

US$30,000,000 7¾ per cent. Guaranteed Bonds 1990

Notice is hereby given that Swiss Bank Corporation, 1 Aeschenvorstadt, Basle CH 4002, Switzerland has been duly appointed an additional paying agent.

Cadbury Schweppes Overseas Limited

EDWORKS (1936) LIMITED
(Incorporated in the Republic of South Africa)

DECLARATION OF DIVIDENDS— DIVIDEND NO. 62

Notice is hereby given that dividends have been declared on the Ordinary "A" Ordinary, 6 per cent. Cumulative Preference shares and 7 per cent. Cumulative Preference shares of the Company as follows:

(a) On the Ordinary and "A" Ordinary shares — an interim dividend of 20 per cent. (equivalent to 2.0 cents per 10 cent share) for the period (1978—10 per cent.).

(b) On the 6 per cent. Cumulative Preference shares—a dividend in respect of the half year ended 31 January 1978, of 3 per cent. (equivalent to 6 cents per R2 share) (1977—3 per cent.).

(c) On the 7 per cent. Cumulative Preference shares—a dividend in respect of the half year ended 31 January 1978, of 3½ per cent. (equivalent to 7 cents per R2 share) (1977—3½ per cent.).

Dividends are payable to the shareholders registered in the books of the Company at the close of business on 31 March 1978 and the cheques in payment thereof will be posted on or about the 1 May 1978.

Dividends are payable in the currency of the Republic of South Africa, and dividends from the London office will be paid in British currency calculated at the rate of exchange ruling on the 13 April 1978.

Dividend cheques despatched from the London office to persons resident in Great Britain or Northern Ireland will be subject to a deduction of United Kingdom income tax at rates to be arrived at after allowing for relief (if any) in respect of South African taxes.

The Company will deduct the non-resident shareholders' tax of fifteen per cent. (15%) from all dividends payable to shareholders whose addresses in the share register are outside the Republic of South Africa.

The share transfer books and share registers of the Company will be closed from 1 April 1978 to 7 April 1978, both dates inclusive.

By Order of the Board
D. H. EDGE,
Secretary.

Head Office:
1-5 [illegible] Road,
P.O. Box 509,
PORT ELIZABETH, 6000.
Transfer Secretaries Office:
Republic Registrars (Pty) Limited,
10th Floor, St. Mary's Building,
85 Eloff Street, P.O. Box 1370,
JOHANNESBURG, 2000.
London Transfer Office:
6 Greencoat Place,
London SW1P 1PL.
ENGLAND.
17th February, 1978

JUSCO CO. LTD.

At a meeting of the Board of Directors of the above Company held on 3rd February 1978, it was resolved that a free distribution of fully paid shares of common stock to shareholders on the register of shareholders as at 20th February, 1978 be made on the basis of one new share for every ten shares then held.

The Depositary Shares of the Company evidenced by European Depositary Receipts ("EDRs") will, subject to the fulfilment of all necessary legal requirements in Japan participate in this distribution through the issue of new EDRs. One Depositary Share is equivalent to ten shares of common stock of the Company, and new EDRs can be issued only in multiples of ten depositary shares. Accordingly any shares representing fractions of ten Depositary Shares will be sold and the proceeds distributed to the persons entitled thereto.

Holders of EDRs are advised that in order to claim their entitlement pursuant to the free share distribution coupon number 3 should be lodged as soon as possible after 20th February, 1978 at the offices of either:—
Hill Samuel & Co. Limited,
45, Beech Street,
London EC2P 2LX;
KredietBank Luxembourgeoise S.A.,
37, rue Notre Dame,
Luxembourg

HEPWORTH CERAMIC HOLDINGS LTD.

Notice is hereby given that the Transfer Books for the 10¼% Debenture Stock 1992/97 of the above named Company will be closed from the 14th March, to 15th March, 1978 inclusive, for the preparation of Interest Warrants.

J. BIRTWHISTLE, Secretary.
Genefax House,
Sheffield S10 3FJ.

BUILDERS INVESTMENT GROUP

Notice to Warrant Holders

Effective January 27, 1978, First Pennsylvania Bank, N.A., P.O. Box 8070, Philadelphia, Pennsylvania, 19101, U.S.A. will be successor Warrant Agent for the warrants issued by Builders Investment Group evidencing the right to purchase its common shares of beneficial interest prior to December 8, 1986. Warrants for exercise or transfer may be delivered to the bank in Philadelphia or to its Agent, Manufacturers Hanover Trust Company, Stock Transfer Department, 4 New York Plaza, New York, New York 10015.

CHARLES E. DELONG
Secretary

7¾% TREASURY LOAN 2012/15
7¾% TREASURY LOAN 1985/88

BONDS TO BEARER

The Bank of England give notice that new COUPON sheets for the above-mentioned Loans will be available on or after 28th March 1978 in exchange for TALONS. Listing forms for talons are available from the Chief Accountant's Office (Bank Buildings), Bank of England, 2 Bank Buildings, Princes Street, London EC2R 8EU, and talons should be presented there for exchange by Authorised Depositaries on behalf of the holders, from the 21st March 1978. Talons should not be sent through the post.

Authorised Depositaries are listed in the Bank of England's Notice EC1 and include most banks and stockbrokers and solicitors practising in the United Kingdom, the Channel Islands or the Isle of Man.

RHONE POULENC 7.50%, 1972-1987
Loan of FF 100000000

We inform the bondholders that the 15 April, 1978 repayment instalment of FF 3000000 has been made by purchase on the Market
Amount outstanding: FF 85000000.
The Principal Paying Agent.

SOCIETE GENERALE
ALSACIENNE DE BANQUE
15, Avenue Emile Reuter.
LUXEMBOURG.

HOME BREWERY COMPANY LIMITED
CUMULATIVE PREFERENCE SHARES

NOTICE IS HEREBY GIVEN that the Transfer Books of the above Company will be closed from 20th March 1978 to the 31st March 1978 (both days inclusive) in order that the dividend warrants may be prepared for the half-year ending 31st March 1978.

By Order of the Board.
B. DAVYS, Secretary
The Brewery,
Daybrook,
Nottingham NG5 6BU.
17th February, 1978.

APPEALS

HELP SAVE OUR EX-SERVICEMEN FROM FURTHER SUFFERING

Wars right up until Northern Ireland today mean that hundreds of thousands of war victims still exist. Ex-servicemen, widows, orphans desperately need homes, jobs, food, fuel and other essentials. Please send donations to:

The Royal British Legion Benevolent Fund, Maidstone, Kent, ME20 7NX

HOME AND GARDEN

1978 SEED AND SEED POTATO descriptive catalogue now available. Sent on request. Postage 7p. R. V. ROGER LTD., The Nurseries, Pickering, North Yorkshire, YO18 7HG

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Hotels and Travel	2.75	10.00
Book Publishers	—	7.00

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Classified Advertisement Manager,
Financial Times,
10, Cannon Street, EC4P 4BY

ART GALLERIES

AGNEW GALLERY, 43, Old Bond St., W.1. 01-329 8176. 105th ANNUAL WATERCOLOURS EXHIBITION. Until 24 Feb. Mon.-Fri. 9.30-5.30. Thurs. until 7.

COLNAGHI'S, 14, Old Bond St., W.1. 491 7408. A Loan Exhibition of Works by SEBASTIANO RICCI in Britain in aid of the UDINE ART RESTORATION FUND. Until 8 March. Mon.-Fri. 9.30-6. Sat. 10-1.

FOX GALLERIES. Exhibition of the paintings of British and European Artists from 1700-1955. 5-6, Cork Street, London, W.1. Tel 01-734 2626. Weekdays 10-6. Sats. 10-1.

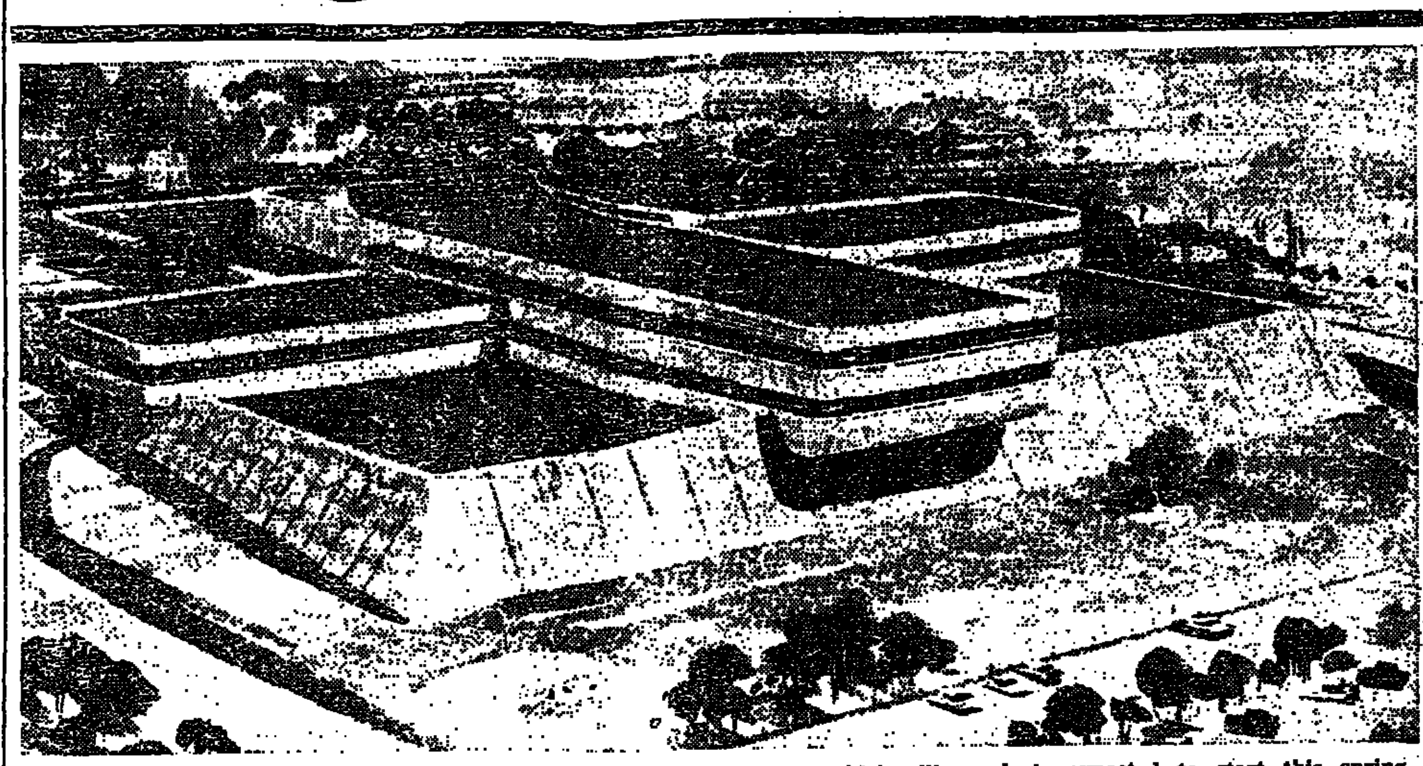
WATERCOLOURS ON THE MALL. Royal Institute's 166th Annual Exhbn. Mall Art Galleries, The Mall, S.W.1. Daily inc. Sundays 10-5. Until 2 March. Adm. 20p.

CLUBS

EVE, 189, Regent Street. 734 5675. A la Carte or All-in Menu. Three Spectacular Floor Shows 10.45, 12.45 and 1.45 and music of Johnny Hawkesworth & Friends.

GARGOYLE, 69, Dean Street, London, W.1. NEW STRIPTEASE FLOOR SHOW THE GREAT BRITISH STRIP Show at Midnight also 1 a.m. Mon.-Fri. Closed Saturdays. 01-437 6455

Building and Civil Engineering



Artist's impression of the Midland Bank's proposed national computer centre which is to be constructed in Wentworth Industrial Park (a Henry Boot development) at Tankersley, near Barnsley, Yorks. Tenders for construction of the centre, which will occupy a 10-acre site, have gone out from would-be main contractors and in the meantime Henry Boot is negotiating for the site preparation contract on which work is expected to start this spring. When completed the centre will have two completely independent computer suites. It is expected to become fully operational in about two years time.

£4m housing for Rush & Tompkins

RUSH and Tompkins is to start work soon on a £3.1m. contract for the construction of 169 dwellings in nine low rise blocks *for the London Borough of* Camden. The site adjoins St. Pancras Station and the work will involve construction of retaining walls and operations on railway arches.

At Exeter, Devon, the company has started on a £700,000 contract for 60 flats for the Raglan Housing Association, while up in the north it has gained a £275,000 award from the Cunningham District Council for the modernisation of 100 houses at Irvine, Strathclyde.

Upgrading an office block

SIR Robert McAlpine and Sons has been awarded a £3m. contract to modernise an office block in Wigmore Street, London, W.1. Completion is planned for late 1979. Installation of passenger lifts, full air-conditioning, new electrical and alarm systems and a total refurbishing of the 110 feet high building, which has a floor area of 120,000 square feet is called for.

Architects are Fitzroy Robinson and Partners.

£1¼m. homes planned for Leicester

TRADITIONAL brick construction is to be used throughout in the 136 dwellings worth £1,252,000 which M. J. Shanley (Contracting) is to erect under contract to Leicester City Council.

The Rupert Estate, North, is the site and the homes will include two and three-storey units providing 20 two-person, one-bedroom flats for the elderly; 26 three-person two-bedroom flats; 37 two storey, four-person, two-bedroom flats; 46 two-storey five-person three-bedroom units and seven three-storey seven-person four-bedroom units.

Conversion by Costain

MIDDLESEX Polytechnic is having part of a warehouse converted to educational use by Costain Construction in a job which entails a great deal of alteration work, including the installation of a new concrete mezzanine slab with columns and foundations through the existing floor.

For Coventry Climax at Warrington, Costain is to erect and complete a large single-storey building with concrete foundations on ground stabilised by the vibro flotation method.

The two awards together come to around £1m.

Crown House orders

LATEST orders received by Crown House Engineering include electrical services for GEC Mechanical Handling at coal preparation plant extensions at Rawdon Colliery in South Wales (£406,000) and mechanical services in connection with air conditioning at Hertford House, London, which houses the Wallace Collection. Hertford House will remain open while the work, costing £275,000, goes ahead.

Two other orders are for mechanical services for the United Kingdom Atomic Energy Authority at Daresbury near Manchester (£117,000) and for power and lighting services in its chassis dynamometer building for Shell Research (Thornton), Manchester (£53,000).

University complex to cost over £40m.

TLEMCEN (an historic city in western Algeria, has been chosen as the site of a major new university centre.

Consultants, the W.S. Atkins Group, have been chosen by Algeria's Ministry of Higher Education and Scientific Research to design the university complex and supervise the construction contracts. Plans call for a university to meet the needs of 8,000 students, with associated halls of residence.

After the design and tender stages, it is anticipated that construction will begin in 1981.

It is, of course, very early days to talk about a total construction cost. But it is thought to be at least £40m.

The architectural work is to be carried out by the Atkins Group's in-house practice, AG Sheppard Fidler and Associates, in collaboration with architectural consultants Shepheard Epstein and Hunter. Gleeds are the quantity surveyors.

Atkins is already working on another major university project in the Arab world—providing civil and structural consultancy for the medical faculty complex, University of Riyadh, Saudi Arabia.

Industrial buildings

OVER £2½m. worth of industrial building contracts have been awarded to Wincott Galliford. The two largest are in the Midlands.

At Garretts Green, Birmingham, the company is to extend Harding's Bakery for R. H. M. Bakeries, under a contract worth over £0.6m., while at Ansty, Coventry a two-storey office block for Rolls-Royce Industrial and Marine Division is to be built, worth £0.6m.

Other major contracts, each worth over £0.3m., are a warehouse at Aylesbury for Galliford Brindley Properties, and a warehouse for Livingston Allpak (U.K.) at Watford Gap, near Rugby.

Mears' £2m. job in Dover

MEARS Construction has been awarded a £2.7m. contract by Dover Harbour Board for the provision of a new imported freight handling area.

The work, scheduled to last 74 weeks, involves construction of a double-walled, ballast-filled sheet pile cofferdam in the Eastern Docks. By this means and the use of sand fill dredged from the Goodwin Sands some 45,000 square metres of harbour area will be reclaimed.

A total of 390,000 cubic metres of sand and ballast fill will be placed during the contract, over 3,000 tonnes of steel sheet piling driven and 30,000 cubic metres of silt dredged. About 40,000 square metres of interlocking concrete paving blocks will have to be laid.

Mears has just completed a £5m. contract for a new hoverport in Dover's Western Docks.

£3m. shops and offices complex

PART OF the site of the old Pontings department store in Kensington High Street, London, is to be redeveloped by Trollope and Colls under a £3m. contract.

The company has just started work there for English Property Corporation for which a 3-storey office block and shops are to be built. Two 3-storey blocks will be constructed and joined at all floor levels by a link block, which will house the main staircases and other general facilities. The buildings will be topped by a mansard roof. The whole complex is to be of reinforced concrete construction.

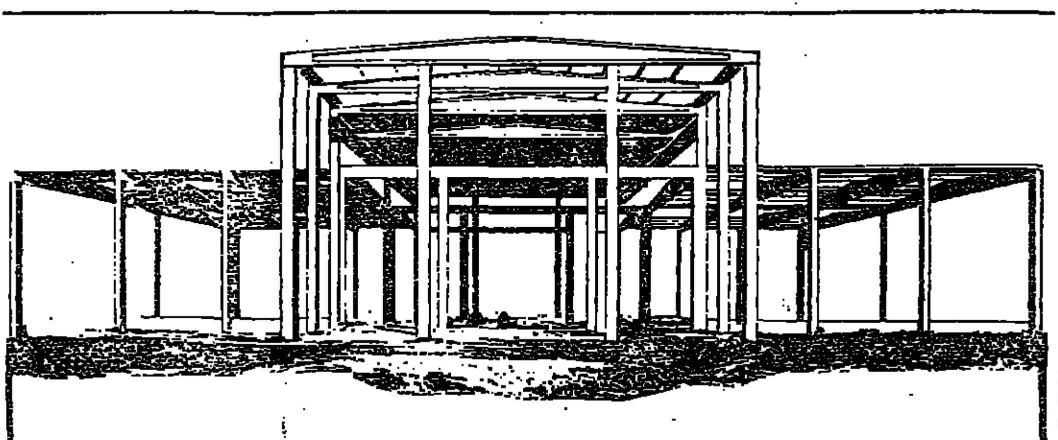
Architects are The Gollins Melvin Ward Partnership.

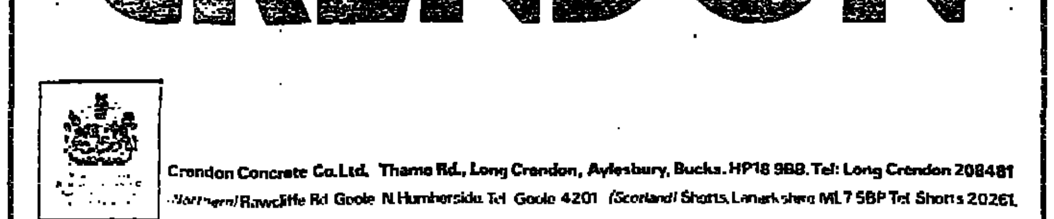
Priced out of the market

CONTRACTS worth £3m. for a plant to be operated by the Arab Aluminium Company of Jordan, designed by the P-E Consulting Group, are going to German and Italian contractors.

British companies competing, says P-E, were apparently unable to match Continental offers so far as prices were concerned. But British equipment is likely to be *supplied to the successful* German and Italian tenderers.

This new plant is to be a major expansion to the aluminium manufacturing capacity of Jordan and will, when completed, turn out some 6,000 tonnes a year of anodised aluminium extrusions.





£3½m. work in Canada

The Toronto office of George Wimpey Canada has announced contracts totalling more than £3.5m. for work in Ontario and Alberta.

The largest of these, worth over £1.25m. is for office buildings for Bramalea in Bramalea city centre, Ontario. Also in Ontario the company has won a contract for roads and services at Milton for Headsborough Investments Inc. at a value of £1.1m.

In West Edmonton, Alberta, the Alberta Housing Corporation has awarded a £830,000 contract for a 60-unit community housing project while the remaining contract, valued at £400,000 is for sewers, drains and water supply for a housing development for Beaumaris Developments in Edmonton, Alberta.

In Trinidad George Wimpey (Caribbean) has been awarded a £500,000 contract for the construction of an office building at Port of Spain, by William H. Scott.

This contract is for a two-storey building of about 24,000 square feet with a structural steel frame and precast concrete floor slabs, reinforced party walls and roof slab. Architects are Gillespie and Steel Associates.

£1½m. for Land & Marine

CONTRACTS worth nearly £1½m. have been awarded to Land and Marine Construction of Merseyside, a member of the Bos Kalis Westminster Group.

Among the larger jobs is the construction of 60 two-bedroom flats in five three-storey blocks for the Maritime Housing Association of Liverpool. This is valued at £520,000.

Other contracts include the building of single-storey factory units (City of Liverpool), sheet piling (Vosper Thorneycroft, Portsmouth), yacht haven repairs (Cowes, IoW), and factory extensions (Van Leer, Ellesmere Port).

Refits for shops

THE shopfitting division of J. E. Wiltshier and Co. has won orders worth over £470,000.

In Doha, Qatar, a jewellery boutique called "Arts and Gems" is being fitted out at a cost of £58,000. Back in the U.K. £352,000 worth of work includes fitting out a new unit in Chelmsford, Essex, for Russell Jewellers (£70,000) and further work in connection with the refurbishing of Norwich Union Insurance Group offices in Fenchurch Street London (£200,000) for which Sidney Kaye Firmin Partnership are architects.

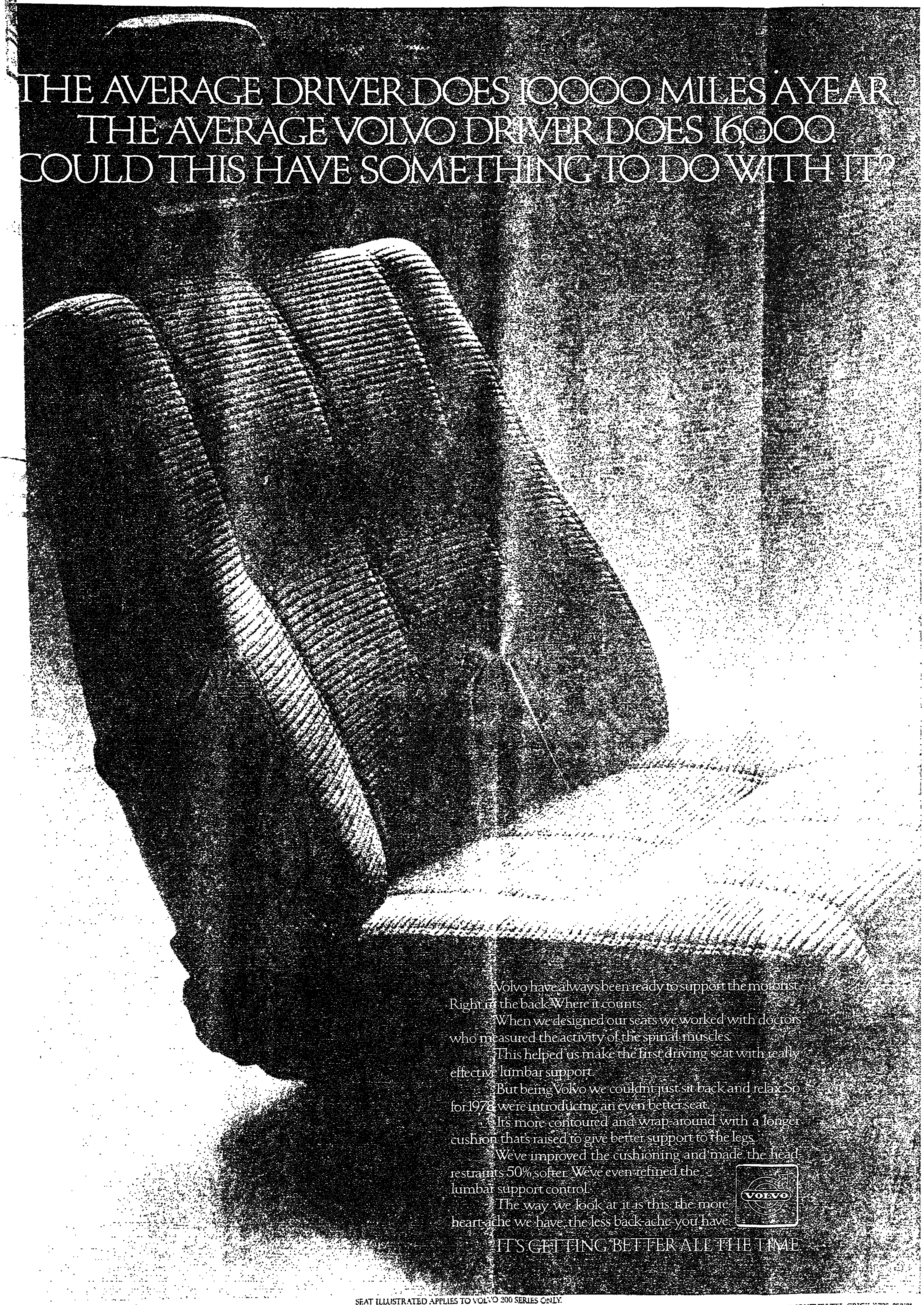
For Amberday Fashions, three contracts call for a complete refit of the existing "2007" shop in Oxford Street, London, and a refurbishing of the King's Road "Just Looking" shop both of which are being undertaken in association with Nicholas Etherington-Smith and quantity surveyors Campbell and Matthes.

PLANT & MACHINERY SALES

Description	Telephone
8 BLOCK (400 mm) IN LINE, NONSLIP WIRE DRAWING MACHINE in excellent condition 0/2000ft/min variable speed 10 hp per block (1968).	0902 42541/2/3 Telex 336414
24" DIAMETER HORIZONTAL BULL BLOCK By Farmer Norton (1972).	0902 42541/2/3 Telex 336414
ROTARY SWAGING MACHINE by Farmer Norton (1972).	0902 42541/2/3 Telex 336414
SLITTING LINE 500 mm x 3 mm x 3 ton capacity.	
TWO VARIABLE SPEED FOUR HIGH ROLLING MILLS Ex.6.50" wide razor blade strip production.	0902 42541/2/3 Telex 336414
MODERN USED ROLLING MILLS, wire rod and tube drawing plant—coil forming machines—slitting—flattening and cut-to-length lines—cold saws— presses—guillotines, etc.	0902 42541/2/3 Telex 336414
1974 FULLY AUTOMATED COLD SAW by Noble & Lund with batch control.	0902 42541/2/3 Telex 336414
1970 CUT-TO-LENGTH LINE max. capacity 1000 mm 2 mm x 7 tonne coil fully overhauled and in excellent condition.	0902 42541/2/3 Telex 336414
1965 TREBLE DRAFT GRAVITY WIRE DRAWING machine by Farmer Norton 27"—29"—31" diameter drawblocks.	0902 42541/2/3 Telex 336414
STRIP FLATTEN AND CUT-TO-LENGTH LINE by A.R.M. Max capacity 750 mm x 3 mm.	0902 42541/2/3 Telex 336414
9 BLOCK WIREDRAWING MACHINE and 1000 lb spooler—non slip cumulative type with double tiered 22" dia. x 25 hp draw blocks.	0902 42541/2/3 Telex 336414
2 15 DIE MS4 WIRE DRAWING MACHINES 5,000Ft./Min. with spoolers by Marshall Richards.	0902 42541/2/3 Telex 336414
3 CWT MASSEY FORGING HAMMER —pneumatic single blow	0902 42541/2/3 Telex 336414
9 ROLL FLATTENING MACHINE 1,700 mm wide.	0902 42541/2/3 Telex 336414
7 ROLL FLATTENING MACHINE 965 mm wide.	0902 42541/2/3
COLES MOBILE YARD-CRANE 6-ton capacity lattice jib.	0902 42541/2/3 Telex 336414
RWF TWO STAND WIRE FLATTENING AND STRIP ROLLING LINE, 10" x 8" rolls x 75 HP per roll stand. Complete with edging rolls, turks head flaking and fixed recoiler, air gauging, etc. Variable line speed 0/750ft./min. *and 0/1500ft./min.*	0902 42541/2/3 Telex 336414
NARROW STRIP STRAIGHTENING AND CUT-TO-LENGTH MACHINE (1973) by Thompson and Munroe	0902 42541/2/3 Telex 336414
YODER ROLL FORMING MACHINE, 30" width, 7-stand. Excellent.	01-928 3131 Telex 261771
DRUMMOND MAXIMINOR MULTI TOOL LATHE. Auto cycle, 12" dia. x 18". RECONDITIONED.	01-928 3131 Telex 261771
BOLEY PRECISION CENTRE LATHE. 10" dia x 24". 28-3550 rpm. EXCELLENT.	01-928 3131 Telex 261771
HORIZONTAL BORER 80 mm PEGARD. Table 49" x 33". facing head 33". Optics.	01-928 3131 Telex 261771
HERBERT 8 PRE-OPTIVE TURRET LATHE 20" *dia* x 56". 13-1000 rpm. REBUILT.	01-928 3131 Telex 261771
CINCINNATI No.3 HORIZONTAL MILL. Table 68" x 15". 16-1600 rpm. REBUILT.	01-928 3131 Telex 261771
54" Dia. COLD SAW, NOBLE & LUND. Max capacity 40" x 18". EXCELLENT.	01-928 3131 Telex 261771
AUTOMATED TURRET DRILL—HERBERT 6 station, 2 M.T., Plugboard control, Co-ordinate table. New 1974. Almost new.	01-928 3131 Telex 261771
BUSCH AUTOMATIC KEYWAY MILLER Automatic cycle. Hydraulic. EXCELLENT.	01-928 3131 Telex 261771
INTERNAL GRINDER—JUNG C8. RECONDITIONED.	01-928 3131 Telex 261771
BLANCHARD No. 11 GRINDER. Mag. table 17" dia. REBUILT. *Very accurate.*	01-928 3131 Telex 261771
MACHINING CENTRE. Capacity 5ft. x 4ft. x 3ft. 5 Axes, continuous path. 51 automatic tool changes. 5 tons main table load. Main motor 27 hp. Had less than one year's use and in almost new condition. For sale at one third of new price.	01-928 3131 Telex 261771
ACME GRIDLEY (BSA) 6 SPINDLE AUTOMATIC. 2⅝" rebuilt and not used since. Will turn and index to maker's limits.	01-928 3131 Telex 261771
WICKMAN 3¼ SINGLE SPINDLE AUTOMATIC. Extensive equipment. EXCELLENT CONDITION.	01-928 3131 Telex 261771
WICKMAN 2¼" 6SP AUTOMATICS 1961 and 1963. EXCELLENT CONDITION.	01-928 3131 Telex 261771
VICKERS 200 TON POWER PRESS. Bed 40" x 36". Stroke 8". NEW COND.	01-928 3131 Telex 261771
200 TON PRESS BRAKE 8' x ¼" by Sedgewick. Air brake, air clutch, light gauge. EXCELLENT CONDITION.	01-928 3131 Telex 261771
HME 70 TONS PRESS DCP3. Bed 36" x 34", stroke 6". EXCELLENT.	01-928 3131 Telex 261771
COLD HEADERS BY NATIONAL ¼" and ⅜" DSSD. EXCELLENT.	01-928 3131 Telex 261771
LUMSDEN VERT. SPINDLE GRINDER. Mag chuck 60" x 18". Model 71LE. Reconditioned.	01-928 3131 Telex 261771
LUMSDEN VERT. SPINDLE GRINDER. 91MLT. Retractable Table 36" dia. EXCELLENT.	01-928 3131 Telex 261771
CINCINNATI CENTRELESS GRINDERS. Sizes 2 and 5. EXCELLENT.	01-928 3131 Telex 261771
HEY No. 3 FACING & CENTREING. Between centres 35", reconditioned.	01-928 3131 Telex 261771

WANTED

MODERN USED ROLLING MILLS, wire rod and tube drawing plant—roll forming machines—slitting—flattening and cut-to-length lines—cold saws—presses—guillotines, etc.	0902 42541/2/3 Telex 336414



THE AVERAGE DRIVER DOES 10,000 MILES A YEAR. THE AVERAGE VOLVO DRIVER DOES 16,000. COULD THIS HAVE SOMETHING TO DO WITH IT?

Volvo have always been ready to support the motorist. Right in the back. Where it counts.

When we designed our seats we worked with doctors who measured the activity of the spinal muscles.

This helped us make the first driving seat with really effective lumbar support.

But being Volvo we couldn't just sit back and relax. So for 1978 we're introducing an even better seat.

It's more contoured and wrap-around with a longer cushion that's raised to give better support to the legs.

We've improved the cushioning and made the head restraints 50% softer. We've even refined the lumbar support control.

The way we look at it is this: the more heart-ache we have, the less back-ache you have.

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Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

AVIATION

Warns of imminent turbulence

SCIENTISTS from the Ames Research Centre of the U.S. National Aeronautics and Space Administration in California and the National Oceanic and Atmospheric Administration's Environmental Research Laboratory in Boulder, Colorado, are now test-flying an instrument concept designed to give airliner pilots several minutes warning of an impending encounter with "clear air turbulence."

This atmospheric phenomenon has been a problem since the beginning of the jet age. These naturally-occurring tempestuous air currents can add unexpected bumps—sometimes exceptionally severe—to an aircraft's smooth passage, even though the sky is cloudless, causing sometimes injury to passengers. It is because of the possibility of CAT, as it is known, that passengers are advised when in flight to keep their safety-belts fastened.

Because CAT cannot be seen, there has long been a need for a simple instrument to detect it in advance. The device now to be tested uses an infra-red water vapour radiometer to measure the amount of moisture present in the atmosphere. Early experiments have shown that it is possible with this device to detect CAT from 2½ to 5½ minutes before it is actually encountered, giving the crew time to steer their aircraft round the problem, as they would round thunderstorms, and so gain a smoother ride. The Joint NASA and NOAA tests will use a Lear-Jet research aircraft.

The two organisations hope that the flights will lead to development of a low-cost system which can be installed in any aircraft. It would operate unattended and require minimum maintenance. If it is found feasible, it will produce a visual signal in the flight deck from four to 15 minutes in advance of a prospective CAT encounter. Both the U.S. agencies believe that such a device would enhance the safety and comfort of civil aviation—and also military operations—by giving pilots enough warning of imminent turbulence. **MICHAEL DONNE**

HANDLING

Improved skip loader

OPERATING TIMES with an all-up weight of 6.98 tons and a payload of 9.02 tons are 35 seconds for loading and 45 seconds for unloading on an improved version of the Edbro skip-handling equipment for 16-ton gross trucks.

A fast lift-off valve permits off-loading an empty skip in 10¼ seconds. A redesigned jackbox has reduced rear overhang by 8¼ inches, and the strengthened jacks are mounted at angle of 12 deg. instead of vertically. The platform now has a uniform length of 10 ft. 4 ins. to suit short as well as long wheelbase trucks.

Axle weight distribution has been improved by altering the geometry of the lifting arms to lower skips further forward on the platform. Servicing has also been simplified, in particular by replacing the full width hinge bar by outboard bearings at the pivot points.

Maximum lift capacity of the new equipment is 11 tons from the ground and 9¼ tons from 2 ft. 6 ins. below ground level.

More from the maker at Lever Street, Bolton, Lancs., BL3 6DJ (0204 28888).

Lifts up the workers

LATEST HYDRAULIC aerial work platform in the range made by ACS Engineering is the Acklift 18000, which has a lift height of 18.2 metres. It is intended particularly for local authorities and contractors maintaining 60ft. lighting columns.

The units can be mounted on any chassis with a gross vehicle weight of 10 tonnes or over a wheelbase minimum of 4 metres. It is provided with four hydraulic stabiliser legs, which both relieve the chassis of torsional stresses and level the unit on slopes.

Capacity is two men plus a load of tools and equipment to a maximum total of 265 kg. The cage measures 0.6 by 2.08 by 1.1 metres. Controls are fitted in the cage with a duplicate set on the chassis. Horizontal reach is 10.4 metres. Slew is through 360 deg. A hand pump is fitted capable of stowing the unit if the power fails.

Optional extras include intercom, spot and floodlights, tool boxes and safety belt anchorages. Details from the maker at the Sheepmarket, Stamford, Lincs., (0780 51815).

ELECTRONICS

Games on a chip

REVEALING that it has now proproduced over 15m. of its first generation of television game microcircuit chips since manufacture started in 1976, General Instrument Microelectronics has taken the trend one step further with a game chip that allows images of motorbikes to be driven across the screen.

The circuit generates a tiny image of a motorbike which moves across horizontal "roads" on the screen at a speed determined by a throttle control potentiometer setting. Obstacles, including a line of eight buses are provided, yielding a total of four games. There is an "easy/hard" switch to select the number of obstacles per track.

The company says it has further games in the pipeline, including shooting, games of strategy and games of chance.

The 28-lead package, called Stunt Rider is officially designated AY-3-8760A and is suitable for both colour and monochrome sets.

More from 1 Warwick Street, London W1R 5WB (01-439 1891).

COMPUTERS

Price change reaction is immediate

COMPUTER control will allow a Sheffield drop-forging company to react to changed steel prices across the whole range of their 3,000 products in less than 30 minutes.

Operating manually, Firth-Derihon, estimates that such a change previously meant up to three months' extra work for staff at its Darley Dale and Sheffield plants.

At any one time, the firm has about 3,000 "live" part numbers made from up to 300 different materials and sizes. Inflation over the past five years has had a significant effect on internal management costs.

Now, using an ICL 2903, the company can completely update the price of every forging in about 25 minutes. The system used has been developed jointly by Firth-Derihon and GMS Computing of Sheffield, both companies within the steel division of Johnson and Firth Brown.

Using distributed data processing, the system brings operations under local control so that they become of more practical help to industrial management. The specialist task of providing technical support is left to the computer bureau which backs up the 2903.

PROCESSING

Light helps refine materials

THE LASER is taking over from the Bunsen burner in the chemical laboratories of the University of Illinois. It is a move which will have important industrial implications in the refinement of chemical substances where purity is the major factor. This includes highly refined silicon for the manufacture of electronic circuits.

In the University of Illinois laboratory, a team led by Robert Gordon has set up a computer-controlled laser system which bombards substances with powerful light beams. This excites selected molecules and causes chemical reactions. In the process, light is used as a catalyst.

The important aspect of the process is that the laser excites only those molecules which are tuned to its own wavelength: in this way impurities can be extracted from a compound to a level of less than one part per million with very big savings in cost.

Pre-set coil winding

USING SIMPLE tooling, and controlled by a microprocessor, the latest Aumann linear winding machine can accommodate wires from 0.04 to 0.2 mm diameter and produce coils up to 45 mm dia. and 50 mm long. Maximum speed is 12,000 rpm.

A pivoted frame carries 12 coils, and when winding is complete the frame is turned through 180 degrees. Wound coils are unloaded while a pre-loaded new set are being wound. Start and finish wires can be automatically wrapped round radial terminals. A special pivot frame can be supplied if the wire has to be wound round axial tags.

All specifications can be pre-set such as pitch, winding width, position of tags for wrapping, winding speed, number of turns, etc., with the program fed to the microprocessor either by tape or pushbutton. The machine is said to be suitable for small or medium size batches, as well as for coils which although similar in size have a variety of winding specifications.

Marketing in the U.K. is by Cole Electronics, Church Road, Croydon, CR0 1SG (01-686 7581), an R. H. Cole Group company.

Coping with effluent

FOLLOWING successful trials in the tanning industry, low cost industrial cavitation aeration equipment is now available which could help small manufacturing companies minimise their water authority sewerage charges by improving the standard of liquid effluent discharged into sewers and streams.

Costing from £800 to £860 according to size, the lightweight, easy to instal units are available in 1, 1½ and 2 metre lengths for fitment to processing tanks.

A 1½ or 2 hp electric motor is mounted at the top of a central shaft down which air is blown for discharge through the four arms of a rotating ejector head at the base. This produces a mass of minute bubbles, reducing the level of air-dispersable chemicals in the effluent and lifting solids to the surface.

Sulphide levels in tanning effluent in a 2,000 gallon tank have been reduced in 3½ hrs. from 2,000 ppm to a level acceptable by water authorities, according to the makers. Running costs are stated to be two or three pence per hour.

Details from Rizzi (U.K.), part of Barrow and Hepburn Machinery, 388, Meanwood Road, Leeds 7, (0532 620332).

Formulation made easy

ORIGINALLY designed for use in the dyeing and printing areas of the textile industry a check-weighing system from Nelson Computer Services is now being made generally available and should find application wherever recipes by weight have to be made up.

Known as Unit 3 the device is microprocessor-driven and is intended for use in conjunction with up to three Mettler electronic balances which are cable-connected. The device has a keyboard, small display screen, printer and indicator lights.

The operator keys in batch number, material reference number and target weights he wishes to achieve. He then dispenses material into the pans of the balances, to tolerances pre-programmed into the microprocessor. Visual and audible indication is given when the weight being dispensed is either approaching or within the tolerance. There are also a number of visual prompts to take the operator through the complete procedure.

The printer shows each batch number, material number, target weight, actual weight and percentage tolerance. Other lists and totals can also be produced. More from St. John's Court, Rawtenstall, Lancs. BB4 7PA (07062 29125).

RETAILING

Laser gets sales data

NOW well established in the U.K. and with plans well advanced to set up a manufacturing unit in Ireland, Data Terminal Systems of Massachusetts since its inception in 1970 has reached a sales figure worldwide of $42m. in 1977 and expects to top $80m. for 1978.

DTS has concentrated on the idea of a stand-alone electronic cash register which enables both the small store manager and the large chain store operator to replace mechanical cash registers with electronic registers without investing in a complete computer-based point-of-sale system.

Customers for the 400 and 500 systems, launched in Britain about a year ago include Trust Houses Forte, EMI and Holiday Inns and in the hotel and catering business DTS, through its U.K. subsidiary Transaction Data Systems, claims to be lead supplier in the U.K.

It is now attacking the supermarket and department store market: a £¾m. system for Habitat involving 148 machines and 8000 stock items will go live in April.

Latest system to appear in the U.K. is the 510, which makes use of a laser scanner.

At the check-out, the assistant simply passes the customers' purchases over a rectangular hole in the surface of the counter, with the bar code label roughly pointing at the hole. The label itself can be in any orientation, and items can be dealt with at the rate of about one a second.

A mirror below the orifice projects a scanned beam at about 30 degrees to the horizontal; the beam scans several lines in both left-right and up-down directions, so that it is bound to pick up the label and scan it, even side-on. The machine then looks up the name of the item and its price and shows them in half-inch characters on two displays, one for the assistant and another for the customer in the form of a rotatable "flag" on a short pole adjustable for best customer visibility.

All the keys on the 510 are programmable so that the device can deal with any method of payment, tax additions or exceptions, discount, and refunds. Any of them can be pre-set to refer to a specific product. Up to 30 of the registers can be interconnected, and on any one of them an executive can call up a variety of updated store-wide reports at any time. Data can be sent to a mainframe computer if necessary. More from Transaction on 0626 865088.

COMMUNICATION

Telecoms in Amsterdam

LIKELY to become a £50bn. industry by 1980, telecommunications is to be the subject of a conference at the Amsterdam Hilton on April 2, 3 and 4 organised by Arthur D. Little.

It will focus on the major competitive issues and market opportunities in the industrialised countries.

Introduced by Arthur D. Little senior executives, the meeting will include presentations by Bjorn Svedberg, president of Ericsson, W. Dekker, Board member of Philips, and Dieter Von Sanden, managing director of Siemens' telecommunications group.

Further details of the conference and registration forms from Valerie Zebedee, Arthur D. Little, Berkeley Square, London W1X 6EY, 01-493 6891).

Light beam links bid

RCA has introduced its first fibre optics data link designed for use in digital data computer links, digital telephony, secure comunications, process control; and high voltage optical isolated data systems.

Optical communications using fibre optics enable the transmission of light waves from one point to another through lightweight flexible cables consisting of ultra-thin strands or fibres of glass or plastic.

Dr. Ralph E. Simon, division vice-president of RCA Electro-optics and Devices, says the entire fibre optics communications field represents an annual sales volume of over $10m. in the U.S. By 1983, it is expected that sales for this segment of the electronics industry will grow to more than $500m. annually.

CONFERENCES

Talks on technology

TO BE held at Kent University, Canterbury, from April 12 to 14, the fourth international symposium on Jet Cutting Technology, organised by BHRA, will deal with a wide range of applications from hydraulic coal mining to underwater cleaning of offshore structures.

Engineers and scientists from Germany, Japan, the U.S. and the USSR will be presenting papers. There will also be papers from U.K. workers, including one dealing with the precision jet cutting of flexible materials, using very fine high pressure jets.

Hydrotransport

The fifth international conference on the Hydraulic Transport of Solids in Pipes, will be held in Hanover, West Germany, from May 8 to 11. Organised by BHRA in conjunction with the Franzius Institute, the conference will cover both theoretical and practical aspects, including pilot plant studies, applications and economics.

Among the papers will be one from Warren Spring Laboratory, TRRL and Imperial College which indicates that even when pumping large particles, overall costs are comparable with those for heavy lorries, while a contribution from the U.S. shows that a five mile line transporting sand will repay its capital cost in less than five years.

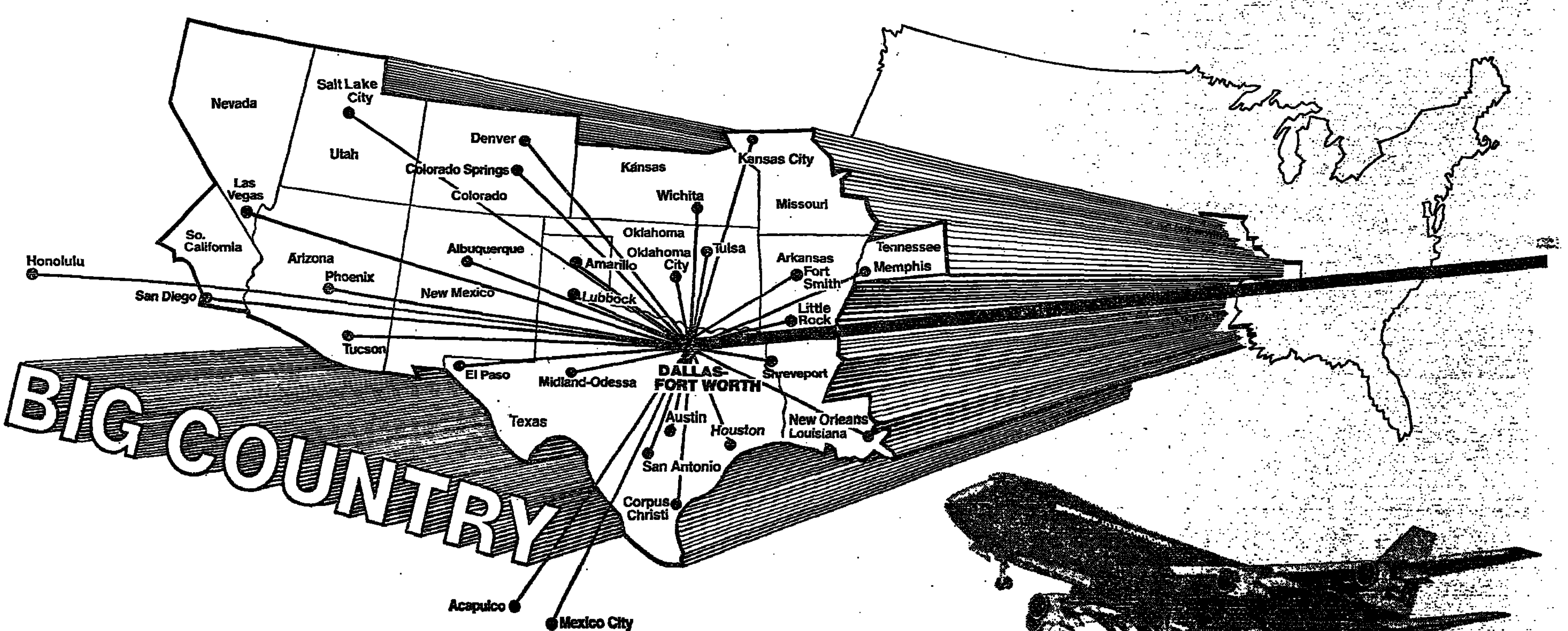
As an alternative to water transport in pipes, powders and particles can be blown along tubes, and material can also be carried in capsules in large diameter lines. Both methods will be covered in papers to be presented at the fourth international conference on the Pneumatic Transport of Solids in Pipes, to be held at Carmel-by-the-Sea, California, U.S., from June 26 to 28.

The meeting, organised by BHRA, will be held in conjunction with the Colorado School of Mines and with the co-operation of the Materials Handling Division of the American Society of Mechanical Engineers. A paper from the NCB indicates that in a pneumatic hoisting system at Shirebrook Colliery 50 tonnes of material/hour can be carried, for periods up to 20 hours/day.

Further details of the above three conferences from the British Hydromechanics Research Association, Cranfield, Bedford MK43 0AJ (0234 750422).

Die casting

Ninth international pressure die casting conference will be held at the London Hilton on May 11 and 12, to coincide with the die casting exhibition at Olympia, May 9 to 12. The Conference is being organised by the European Pressure Die Casting Committee in co-operation with American and other overseas die casting groups. The Zinc Development Association and the Light Metal Founders' and Zinc Alloy Die Casters' Associations are making detailed arrangements. More from ZDA on 01-499 6636.

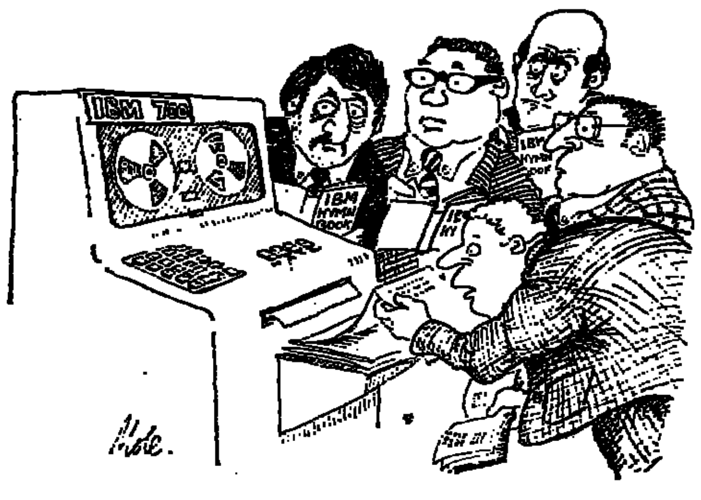


The Executive's and Office World

EDITED BY CHRISTOPHER LORENZ

Creating a common culture at IBM

BY JOHN THACKRAY



It says do we do requests ?

RE IS a story that has been ing around U.S. manage- t circles for many years: at certain hallowed ients the middle and senior utives of IBM, dressed in e button-down shirts, dark an short hair, sing special hymns.

ch behaviour may be de ir in Japan, but in the U.S. nsidered deviant. Rumour ier has it that the company s were written by one of founding Watson clan, and their themes urge the itives onward and upward e pursuit of excellence and . Whether the story is true, or ever has been, is he point. For in a crude, yphal way it underlines a large, disparate corpora- needs to weld its top people her.

IBM to-day this corporate al acculturation, the pro- ation and maintenance of d attitudes and procedures, ually done largely through the company calls agement development."

s term is one of the st and most over-used in gement textbooks, but in ase, as in most big U.S. rations, it is taken to cover l inter-related procedures, which theoretically con- e to the individual's gerial growth. These in- job counselling by man- nt superiors to their linates; appropriate job n and job assignments; mance evaluations; and the subject of this article agement education. "IBM y training conscious, to an unusual degree," says Professor Leonard Sales of Columbia University Graduate School of Business, who has close contacts with the company. "Their massive commitment to management education gives them a common culture and consistency of operations."

Out of its near-300,000 employees round the world, of them in the U.S., IBM classes 35,000 of them as "managers," of whom 20,000 are in the U.S. Unlike many other companies IBM does not define a "manager" according to his salary level, or the intellectual content of his work, but according to whether his or her job includes responsibility for a wide range of functions concerned with the supervision of people: their hiring and firing, the formulation and evaluation of a performance plan for each of them, administering their salaries and overall "compensation," and advising them on their career.

It is a stated company objective that each and every one of these managers should have at least one week of formal management training every year—covering such issues as motivation, communication and "interaction"—quite apart from any training in skills such as accounting, marketing, programming or whatever.

As if to show how seriously it takes its educational mission, the company is currently building five structures on a campus-like area on its headquarters property at Armonk, New York, which will be used for nothing else except management education—all 183,200 square feet of space. Up to now it has used a wide range of accommodation, some of it rented, at scattered locations in New York and Connecticut.

IBM's educational courses in the U.S. are structured as follows. All new recruits to its management ranks — whether from within the company or outside—must attend a week's intake training within 30 days. At middle management level, school covers three periods of a week each. Higher up the ladder there are no fewer than four different programmes, in addition to an external training programme that uses more than two dozen outside sources, such as the MIT Sloan School of Management, or the Aspen Institute for Humanistic Studies.

As the executive moves upwards, the content of the education subtly changes, its emphasis moving from the specific to the more general, and, finally, touching on such cosmic issues as the course of civilisation itself. But the most valuable stage of training from the company's standpoint is that first week of indoctrination for the toilers who have succeeded in moving from the ranks of the managed — salesmen, clerical workers and others—to those of the managers.

The course has a strong practical edge. Heavy emphasis is placed on the U.S. equal opportunity laws and other employee rights; on the technicalities of merit pay; and the development of a wide range of communications skills. Participants are also told about the latest legislation affecting handicapped workers, pension and safety rules and about the effect of IBM organisational changes.

Methods

Many large U.S. corporations have approached IBM to enquire about its management training methods. "People from other organisations ask us to tell them about our programmes," says Edward F. Kreig, the company's director of management development. "After we tell them about our 'nuts and bolts' approach to emphasising basics, they are surprised that's all we do. We don't do a lot of esoteric training. We believe in plain fundamentals."

Ed Kreig is a medium-sized man with broad shoulders and rimless glasses who talks in a slow, deliberate drawl. He likes words like "fundamentals," and he sees IBM as the creation of traditions in management which have been modified but never corrupted since the tabernacles were laid down by the founder, Thomas Watson Snr. In a company widely reputed on the outside to be a very conformist institution—the "no alcohol" rule on company premises being only the most obvious illustration—Ed Kreig will oddly talk at length about IBM's "respect for the individual"; this is one of the "fundamentals" that the new management recruit must embrace.

IBM sees it as an indication of its inherent strength, that most of its training is done in-house and not, like several other big corporations, largely on the outside.

"We are a company with a certain amount of universality to it. The concept of the merit system of pay and promotion exists in Europe essentially as it does in Akron, Ohio. The employee-manager relationship is as important in Israel as it is in Cleveland. Promotion-from-within, another basic tenet, is as important in IBM Germany as it is in Belgium. We believe this universality would be compromised if we departed from our internal training."

In keeping with the "nuts and bolts" approach to its management education, IBM has a minimum of full-time teaching staff: Some are needed to provide continuity, and to enhance the lecturers' skills: the company prefers most of the educating to be done by IBM line managers. Lecturers on the intake courses will be assigned a two-year stint in the management development sector. At the higher reaches of the training process the working manager's role as pedagogue will be just for a week or two at a time. Here even the chief executive has a role to play as teacher.

How does IBM know that its approach is the best? It goes to considerable trouble to evaluate the programmes, using one of the company's favourite tools—the opinion survey. Approximately every two years, each IBM worker is given a chance to state anonymously his answers to a series of questions about his concept of his job, his manager, the company, his future.

These replies are crucial in formulating the kind of management education that takes place, as well as giving a feel for the results of management education. Thus if the surveys showed that IBM brass were viewed as better at manipulating skills than managing people, the whole educational structure would be promptly revamped.

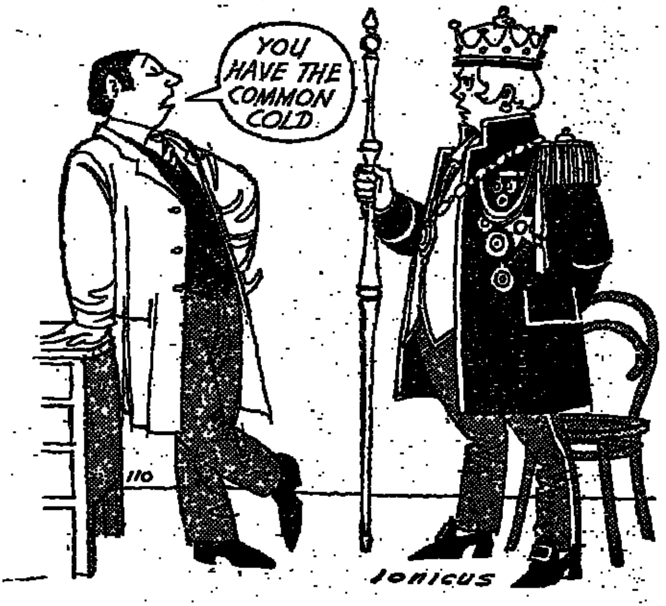
In addition to this samples of the attendees at these courses are surveyed in person six months after, and their evaluations collated and used to amend the curriculum. As Ed Krieg says, "We make something of a fetish of communication."

By the time the executive reaches middle management he will be well on the way to absorbing the corporate culture. Yet at this time in his course, the culture and basic skills by themselves begin to be inadequate for grappling with many aspects of the world outside. So this group is taught such things as decision making in an ill-structured environment—one of the more sophisticated IBM offerings. And at senior management levels, civil rights leaders will talk about class and race in America: or an academic on how to do busness in a highly legislated environment.

Yet these more refined ingredients are not the substance of the programme, according to Krieg. "If you depart from the fundamentals of respect for the individual and equal opportunity, the merit system, and good communication skills, the employee's perception of his or her manager is going to deteriorate. We've proven that with our employee opinion surveys," he says. "When we've seen the the morale factor contributing to a dip, and we've gone back and asked how much of the emphasis is on the fundamentals there, we've sometimes seen a watering down of them. And what happens then? We say: 'Back to fundamentals.' It works. It's historic. It's irrefutably correct."

Careless talk that causes heartaches

EXECUTIVE HEALTH BY DR. DAVID CARRICK



THE UNDERSTANDING physician is, alas, becoming a stranger from the past. With notable exceptions, the "bedside manner," which may be just as useful as a pocketful of pills or an infinite number of intricate, impersonal investigations, is as modern as the dinosaurs.

The introduction of the NHS when the invaluable honorary physicians and surgeons ceased to be, began the slide. The *selection of medical students on* the grounds of technological meritocracy, chosen only because of their high "A" level scores, hastened the process: and the regrettable tendency to ape American computerised medicine certainly has not reduced the angle of the fatal slope.

Too often—perhaps because the doctor has more patients than time—a patient may be frightened badly by some hurried, careless comment: then there is the one who examines in grim silence, or talks in technological terminology; or, I regret to say, adopts a callous attitude, all of which can cause the ignorant sufferer to be much affrighted and further convinced in his own bleak conceit.

Examples are so numerous that I can cite a mere handful. *Take callousness. I know noth*ing worse than placing a large card above the bed of an aged person giving the name and age—a desperate revelation to elderly females in particular. Recently I visited an old doctor in hospital. A doctor of fame, both for his medical skills and gallantry, who had been awarded an M.C. in World War One, and then had gained an M.D. He lay in a bed above which were the words: H. R. Forbes, aged 85," which piece of beastly bureaucracy distressed me and brought melancholy to the old man's last few days.

The silent or terse physician may, by a solemn shake of his head, a few "tut tuts" and a "humph" or two, create dreadful anxiety in the apprehensive. Technical language, without explanation, can likewise be pe*culiarly pernicious.* Of the numerous examples, I choose a few of the more dangerous samples. If a patient is told that he "is in heart failure," that is as sweet as the sound of a funeral bell to him. What is meant is that the heart is failing to do it's job efficiently: it does *not* mean that it is about to stop.

Sometimes a patient is told he has a "heart murmur." If it is not explained that benign murmurs greatly outnumber those of significance, then one may expect even the boldest patient to develop cardiophobia. Again, the word "thrombosis" is terrifying because the patient usually thinks only of the dreaded "coronary thrombosis," whereas thrombosis of superficial veins in the legs or arms are as common as they lack importance.

Now I saw a very worried man recently who had been examined for assurance purposes (upon which a mortgage depended) and had been carelessly told that he had "sugar in the urine" and so had *diabetes mellitus*. In fact, he had *diabetes innocens* because his kidneys had a lower than usual threshold and simply leaked sugar. In the absence of excess sugar in the blood, as with this man, diabetes mellitus is not present.

The patient with a sore throat whose adjacent lymph nodes (commonly called "glands") are enlarged, can have sinister thoughts. There is no need, because these nodes are draining the infected area and battling with the organisms. Without being told this, his sinister thoughts may increase alarmingly.

I once saw a pregnant woman who was upset and insulted because she was described on the notes as an "elderly primipira." Being but 31 she was much aggrieved. It is a bad term but merely means that a woman over 30 is expecting her first baby.

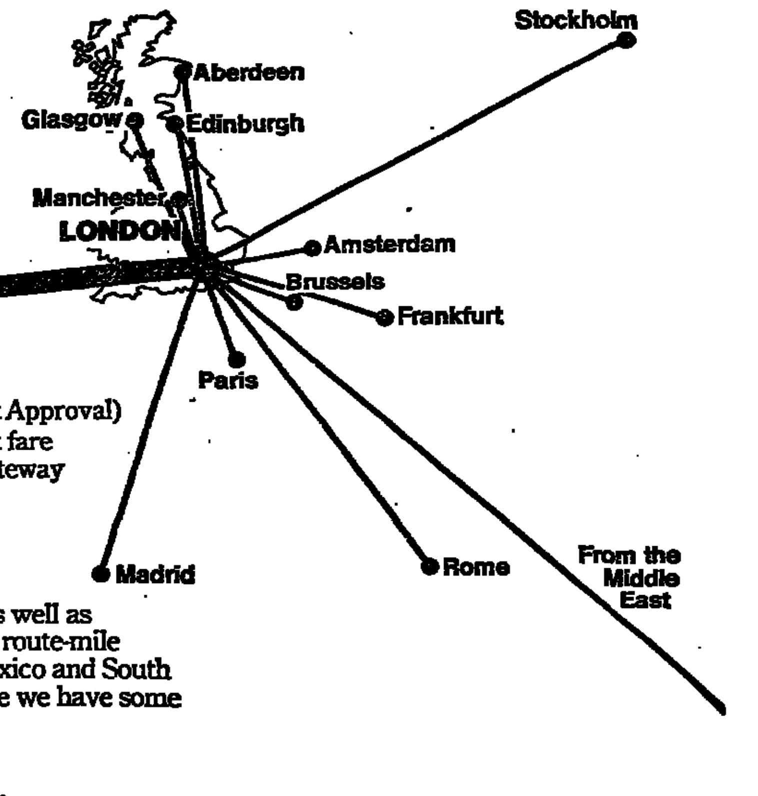
The list is endless, but I will close with a tale of misunderstanding. The patient was a fine-looking immigrant. He was much fussed about something until I asked, bluntly: "Just what is bugging you ?"

"Well," he burst out, "This morning I went to a casualty department and the doctor tells me 'You've got a common cold!'" Surprised, I said: "So what ?" He dismissed my query hotly, adding: "I am of great importance; how then could I have a *common* cold ?"

I saw the problem and, for once, employed medical jargon. "Supposing we called it an afebrile coryza of idiopathic origin ?"

"That is beautiful, Doctor," he beamed, "please write it down, it sounds very cultural!" I refused and told him he must learn it by heart, and he marched happily away repeating: "Afebrile coryza . . ." Then he turned back. "What was *that last piece? That I really* like!"

I told him and realised that I had learnt a lesson. One who does not possess a perfect grasp of a language, may feel that he is being insulted and, as racial relationships are somewhat delicate, one must tread as carefully as a cat lest it jumps violently out of a smouldering bag.



LOMBARD

What Germans fear most

BY JONATHAN CARR

A few years ago the then West German Finance Minister Helmut Schmidt made a remark which he has since been trying hard to live down. The sense of it was that his countrymen could put up with 5 per cent. inflation better than they could with 5 per cent. unemployment. To-day it looks as though that may be almost exactly the reverse of the truth. And that point is worth bearing in mind by those foreigners (we'll mention no names) who feel internal pressures may force the German Government to reflate to create jobs—even if this means taking a bit more inflation on board.

The Germans have now had three successive years with an average of around 1m. unemployed and are embarking on a fourth during which, if anything, the situation may slightly worsen. Wouldn't you think that by this time the trade unions would be agitating fiercely, confidence in the Social Democrat-Liberal coalition Government would have *evaporated and—to put it bluntly*—the stability of German democracy would be in jeopardy?

Agitation

The truth is the unions are agitating in what, for German unions, is a rather fierce way. But their main concern is to obtain higher wage increases for those in work rather than to ensure that those who are jobless find work. (We'll skirt the fruitless controversy on whether increased wages mean a net loss of jobs through higher costs or a *net gain via increased consumer* purchasing power. You pays your money . . .)

The unions are *probably* right with their priorities. They can hardly have failed to notice that solidarity between those in work and those out of it is not all it might be. Take a skilled mechanic (one of those labour groups in the Federal Republic for whom there is still a crying need) who puts in a good day's work and sees a fair slice of his gross pay going in tax and deductions—including unemployment insurance. Nearby lives a rather less-skilled labourer, out of work for a few months now—but not apparently very much the worse off. Thanks to the excellent social security system he is receiving 68 per cent. of his former net income—and seems to be doing a bit of remunerative "black" labour on the side. Our mechanic would not wish real hardship on anyone. But he does have the uneasy feeling that the system may be making a fool of him.

Two types of criticism are usually made of those who draw this picture. The first is the hostile and sweeping demand—Do you therefore propose the dismantling of the social security system? The answer is that it is surely better to err in this case on the side of excess—but that an imbalance either way brings its own problems. And after three years of high unemployment combined with a high level of protection for the unemployed—it is the problems of excess which are starting to show up more clearly. Take the dramatic decision last week by the Government that pensions will rise over the next three years by much less than they have increased over the last three. There is talk of a betrayal of the "solidarity pact between the generations" — that is between those who work and pay contributions to-day and the elderly or infirm who once did the same. But the fact is that over the last few years pensions have increased by around 10 per cent. annually — considerably more than the rise in wages and salaries. Solidarity is a fine sentiment — but cannot be strained too far.

The second type of criticism is more detailed. It is claimed that the picture of the mechanic and his unemployed neighbour is an extreme one. After all, the jobless in Germany only receive that 68 per cent. of former net income for a year, after which the sum drops and is subject to a tough means test

Higher prices

Finally it would seem slightly absurd to attempt to assemble accurate statistics of the extent of "black" labour, but the diligent Germans have just had a good try. It is estimated that the annual loss in turnover because of "moonlighting" totals more than DM20bn.—to say nothing of the loss to the state in tax revenue and insurance contributions. Clearly many of those doing illegal work on the side are not registered unemployed. Just as clearly many of those who are unemployed would have the opportunity of a job if "black" labour could be stamped out. The official estimate is that roughly 200,000 extra places would be available—a figure hardly likely to render most honest trade union members more susceptible to arguments that granting their higher wage demands will increase the jobless total. The phrase "more than one million unemployed" no longer scares as it used to. But the recognition that prices are higher this year than they were last hurts the Germans as much as ever.

THE WEEK IN THE COURTS

The handmaiden of the commercial man

BY JUSTINIAN

BUSINESSMEN IN commercial dispute are not always separated (as are ordinary litigants) by quarrel or grievance. They generally seek the resolution of their disputes without rancour and in friendliness, mainly because they *know* that they will continue to trade with one another in spite of their dispute.

Any economic system worth its salt provides for the settling of commercial disputes in accordance with the ideas of commercial men, which are very different from other litigants. If the ordinary courts do not adapt their procedures and provide a satisfactory forum, then businessmen will turn to others who will provide a swift and understanding service. Hence the growth of the system of trade arbitration tribunals.

Thus in 1895 the judges established the Commercial Court within the confines of the Royal Courts of Justice in the Strand. That court has always prided itself upon being as much a part of the City of London as it is of the machinery *of justice administered in the* ordinary courts. The part that London has played in international shipping and insurance has benefited enormously from the willingness of foreigners to litigate in the Commercial Court.

Working party

But from time to time the lawyers are made aware that there is a degree of disenchantment among commercial men with the workings of the legal process. The speed, efficiency and economical service of the Commercial Court is not always as apparent to businessmen as it appears to the legal profession. The announcement last Wednesday by Mr. Justice Donaldson, therefore, that the Commercial Court Committee has set up a working party to review the court's procedures will be widely welcomed. And as an earnest of how much lawyers desire to go on improving the procedures, Mr. Justice Donaldson took a first, not unimportant, step in that direction. In a case where he had reserved his judgment, he handed down his written judgment instead of occupying valuable time by the traditional process of solemnly reading the elaborate reasons for his decision.

Since that enterprising judge invites suggestions for improvement from those with experience of the work of the court, Justinian, while not claiming any expertise in commercial litigation, feels moved to offer some general observations. One fact is starkly clear: any improvement in the service the law offers to businessmen in dispute *must* take account of the basic difference in approach of lawyer and businessman.

Written word

The lawyer inevitably has an attachment to the written word. He may let business practice influence his thinking in the construction of a business contract: but he cannot so easily allow it to contradict or add a new matter to the language that businessmen have used in their written contract. The businessman is prone to treat the formal contract—the document that he rarely bothers to read — as simply the seal upon the bargain that has been arrived at through the common understanding between the parties.

It is not easy to effect a reconciliation between these two approaches. Businessmen as a rule like the idea of a written contract: it gives them the feeling that they have neatly wrapped up their deal, like some parcelled gift. But they do not often give the time and thought that is necessary for the drafting of precise and comprehensive terms. Indeed they display little taste for the task of draftsmanship; they like the solemnity of the contract, but care too little for its details.

To the lawyer the written word has the supreme virtue of certainty and permanence. He tends to presume that the contract is the embodiment of the wishes of the contracting parties. The refusal by lawyers to look behind the contract to see what were its ingredients provides a rigidity under which businessmen sometimes chafe. In any proposals for reforming the Commercial Court must thus meet the business attitude.

Market place

In recent years there has been a tendency to admit into the contract the custom and practice of trade. The written contract has virtully killed the application of the custom of the trade. When trading was done in the market place and conducted by word of mouth, custom was supreme: those who came there were expected to inform themselves of the custom. But with the expansion of trade, when buyer and seller no longer meet face to face, the written word has superseded the spoken. Identification of custom common to both parties became more difficult, indeed, they may have traded against the background of differing market custom. With the development of telex and telecommunication, the pendulum has swung back. Communication is less impersonal than it has been in the recent past, although it has a long way to go before it simulates the market place.

The most healthy development has been the standard form contract, easily adaptable to any commercial transaction. The increasing resort to the incorporation into contracts of international conventions, such as the Hague Convention on the Carriage of Goods by Sea, has helped to provide accommodation between lawyers' precision and the businessman's desire for uncomplicated expression of his bargains.

At root, the lawyer must be the handmaiden of the businessman. The former must constantly bow to the needs of the latter, while retaining his own art for clarity and certainty in the language used.

Welsh forwards far ahead of Scots in technique

RUGBY UNION

BY PETER ROBBINS

DESPITE THE glacial conditions Wales's match against Scotland on Saturday was splendid entertainment, full of good intentions and interspersed with some exhilarating rugby.

Wales won 22-14, but Scotland's supporters could well argue that a draw might have been fairer. Morgan missed two easy penalties in each half and failed to convert Renwick's and Tomes's tries.

The fact is that the Welsh forwards were so far ahead of the Scots in technique that the claim would be spurious.

Not that the Scots gave their neck and indeed, Wales made as many errors in the second half as Scotland. Wales, however, had the points to play with, thanks to a devastating burst of scoring at the beginning of the second half.

At half-time, Wales led 8-7 through tries by Edwards and Gravell to a penalty by Morgan and a try by Renwick. No sooner had the match restarted than Bennett dropped a goal and then Fenwick scored a try and Bennett kicked a penalty. Ten points in seven minutes was fearful punishment, yet amply demonstrated Wales' ability to change gear.

Wales may have relaxed subconsciously, particularly when Quinnell added another try from some brilliant thinking by Gareth Edwards. Edwards was about to pass to Bennett but then whipped the ball back to J. J. Williams, who sent Quinnell careering 25 yards for a monumental try.

However, Scotland also had a lot more to say, and after a ghastly miss from Morgan, Hay ran right through, supported by Biggar, who unfortunately turned inside with men to spare. Decisions have to be taken instantly, and those fractions of seconds in choosing options are the difference between success and failure.

Biggar again hammered away, as did Hay, Gammell, and McGeechan, but there was no way through. Yet *that Scottish* pressure gave Morgan another penalty and then ten minutes from time Tomes crashed over from a set-piece penalty similar to that used for Gravell's try. Wales enjoyed the closing moments, but everyone was so numb with cold that the final whistle was very welcome.

Wales owed their victory to a tremendous forward display, especially in the tight scrum, where Windsor took four strikes against the head, once, crucially, on his own line. The drive in the scrum was irresistable, and committed the Scottish back row to a tighter role than was really acceptable. In turn, it released Cobner, Quinnell and Squire to lend some outstanding support to Edwards and the three-quarters.

Quinnell had a superb match, but it was in the collective play where Wales were so much superior. When a Welsh forward advanced, he was followed by a wave of red jerseys, whereas Biggar and McLaughlan were *bravely isolated.*

Edwards was as masterful as ever, but there was some sloppy passing from Fenwick and Gravell that a quicker side would punish more severely. If collective discipline and individual flair won the game for Wales, they were also helped by some solid defence and tackles by Cobner on Gammell, and Quinnell on Hogg (Shedden's early replacement) in Scotland's purple patch. Both were two savers. Gravell appeared to be a mobile fortress.

Scotland, although guilty of serious defensive lapses, have a rather exciting back division. They used Cranston to come inside and Renwick's pace to try and exploit that punch. But like Wales, they lost themselves.

Scotland's best forward effort was at the line-out with McHarg, Tomes and Macdonald all winning their fair share, but often non-productively. Certainly, the Scottish pack won enough ball for Morgan and McGeechan to control the game more emphatically than they actually did.

Now Wales go to Ireland in search of their third successive Triple Crown, and France come to Cardiff looking for the Grand Slam.

Irish find victory in defeat

IRELAND are convinced they had found victory in defeat after they were beaten by France, 10—9. Considering the pre-match predictions, they were probably right.

The Parc des Princes was scarred by old Soccer markings and was so hard that 35 minutes before kick-off the match was in doubt.

Ireland, having made a late substitution of Harry Steele, normally a No. 8, in the second row, were reluctant to play.

But the French federation insisted, and while the conditions cried out for safety first the crowd, which braved freezing weather, was treated to a remarkable and exciting game.

France put Ireland under pressure yet they were unable to turn the pressure into points with Ireland managing to win the ball when they most needed to.

At the end, in typical fashion, they broke away to an attacking position on the edge of the French 25, to try and snatch a win.

The French would have won by much more were it not for Aguirre, the fullback, who missed six out of his eight kicks at goal.

The Irish pack was beaten in the line and it had trouble very early controlling the set scrum.

Scrum half and captain Moloney coped well, while Ward, playing his second international, looked like a seasoned professional.

Ward is undoubtedly a player to watch for the future. He combines some of his skills as a soccer player with the sort of tactical kicking that is associated with one of his predecessors, McGann, and Gareth Edwards, the Welsh scrum-half.

The Irish back division played and the centres showed some attacking flair in addition to the defensive qualities.

Gibson, who played for the first time on the wing, showed that at 35 and after 63 caps he is still a hungry player and a dangerous one.

Ireland's next match is at home against Wales on March 4, mercifully without additional injury problems and in a bouyant mood. They could easily rock the heads that wear the triple crown.

For France, there was a marvellous display by the back row of Rives Skrela and captain Bastiat. It is to be hoped that the rumoured retirement by Skrela from international rugby proves to be false.

Gallion produced a dazzling try when he scooted through unimpeded from a set scrum 30 yards out from the Irish line.

STUART ALEXANDER

Forest only need defrosting

SOCCER

BY TREVOR BAILEY

THE EVER-BUSY Gemmill spurted down the left flank to receive a long forward pass from Barrett and his floated centre enabled O'Neill—who had raced unnoticed from midfield—to beat Parkes from close range with his head only two minutes from the final whistle.

This splendidly conceived and executed goal means that Nottingham Forest are still very *much in the FA Cup after this* 1—1 draw at Queen's Park Rangers.

Provided the replay is not staged on a bone-hard pitch which inevitably reduces the effectiveness of this stylish team, I expect them to beat Rangers by at least three goals, an indication of the gap that exists between the two teams.

Forest made most of the early running, so that it came as something of a surprise when the Rangers took the lead in the *19th minute*. Busby flicked home an inswinging corner at the near post which, possibly, Shilton should have intercepted.

This setback, combined with conditions which made standing, let alone control, difficult caused Forest to lose some of their poise and Busby squandered a great opportunity to put his team further ahead from only a few yards.

The second half belonged largely to Forest, who mounted attack after attack on a broad front, but were kept out by a resolute defence, in which Clement was outstanding, and some superb goalkeeping by Parkes, who brought off a number of brilliant saves, before being beaten in the closing moments.

The conditions demanded brave players, and one important reason why Forest have been so successful is that their team contains no cowards. This was epitomised by Burns, who in spite of having one leg hurt for most of the match, provided cover for a back four which was less convincing than usual.

He also demonstrated the self-control he has learned under Brian Clough, which was demonstrated when he did not retaliate after being kicked by Givens, an incident which would have reduced Rangers to ten men had the referee seen it.

On this showing, the London side will avoid relegation. They *have a strong, uncompromising* defence, with Parkes outstanding in goal; while Bowles, well supported by the bustling Hollins and Shanks, has brought a new dimension to their midfield trio with his class and skill.

Rangers' real need is a sharp finisher to capitalise on the ability of Givens to win the ball in the air.

Can Forest achieve the treble? They possess the class, composure and courage. The biggest threat to this objective could prove to be an increasingly congested fixture list, which is exactly what sank the great Leeds side when they were chasing three titles a few years ago.

Guilt on Arsenal gingerbread

HISTORY, of course, did not repeat itself. Third Division Walsall, 2—0 conquerors in 1933 *of Arsenal, League champions* that season, were brushed aside 4—1 at Highbury on Saturday.

Walsall looked an astute, well-blended side, worthier of higher things than their tenth place in Division III, and undeserving of Arsenal's last-minute goal that unbalanced the score.

Alan Buckley, Walsall's chirpy striker who has scored 22 goals this season, looked well worth a fat fee from a First Division club. Maybe that is why Walsall have reputedly awarded him a *nine-year contract; what logic is* there in a Third Division club and a star player tying themselves for such a time?

Buckley moves well, lays off the ball wisely, acts decisively, *and took his goal splendidly.* Incidentally, he had 16 First Division games for Nottingham Forest, scoring only one goal, and leaving them after they were relegated to Division II in the 1972-73 season.

After the 1933 upset, the great Herbert Chapman, whose bust surveys Highbury's marbled entrance hall with the intensity of a Sutherland Churchill, sacked an Arsenal player. The man, playing his first senior game, kicked a Walsall player to concede *the penalty that made it* 2—0.

Certainly no Arsenal player will be sacked after Saturday's stroll. But I do hope that Mr. Terry Neill rebuked his fellow Ulstermen Nelson and Rice for two ugly fouls that were worthier in my judgment, of referee Gow's yellow card than a late tackle by Walsall's Evans, formerly of Wolves, Liverpool, and Villa.

I cringed at these pieces of guilt on Arsenal's gingerbread and I rued Mr. Gow's inconsistencies. Early in the game a *Macdonald ball dealt him a rasper* on the rump. It later seemed appropriate — but being unsighted at the time, perhaps he felt that it was Walsall who deserved retribution. Which, indeed, was how it worked.

JAMES FRENCH

Beven and Ocleppo repeat history

TENNIS

BY JOHN BARRETT

AFTER a week of hotly disputed matches in arctic conditions the two BP Cups for men and women under the age of 21, were won by Britain and the U.S.

Britain's men's team, captained by Paul Hutchins, regained the trophy they last won in 1974 and the American girls won the international team trophy for the first time after three successive losses to Britain in the past three years.

The key to Britain's success in this event involving 42 players from nine countries was the 7—6, 6—4 win by the No. 1 player Robun Beven over Italy's No. 1 Gianni Ocleppo, considered the outstanding player of the week.

In the three days of Round Robin play and in the semi-final on Thursday, Ocleppo won his singles matches and, partnered by Graziano Risi, won the deciding doubles to carry Italy into the final for the second year running.

But the fast wooden courts of the Palace Hotel, Torquay, suited Beven's aggressive game. By serving a high percentage of first balls in and decisive volleys, he kept the pressure on the talented Italian.

In last year's semi-final, Beven engineered a similar victory against Ocleppo and it was the memory of that success that sustained the Sussex left-hander in the vital tie-break of the opening set.

Ocleppo led five points to three, but, from that moment Beven raised his game to win the sequence nine points to seven.

The British girls, led by Anne Hobbs of Cheshire, swapped the two singles matches on Friday. But when Deborah Jevans lost to the U.S. No. 2 Barbara Jordan 6—0, 6—2 on Saturday the odds were always on an American victory.

In the top singles match, Miss Hobbs fought valiantly against the U.S. No. 1 Zenda Liess, but despite winning the opening set tie-break seven points to four, she could not destroy the relentless accuracy of the American's drives and lobbs.

Two nine-game sets went against Miss Hobbs to give America a 3—1 winning lead—thoroughly deserved by virtue of a greater American consistency.

Four new awards were instituted this year: two for the most promising newcomers.

Jochen Settelmayer of Germany who was within one point of taking his country into the semi-final, with the men's award.

The women's award went to Lotta Stenberg of Sweden, the playing captain who was within two points of scoring a win against Czechoslovakia.

The other two awards were for the most valuable players involved in the finals. They were awarded to Beven for his win against Ocleppo and to Miss Liess who was undefeated all week.

After six years, the competition has become a major event and has outgrown the somewhat limited accommodation in Torquay.

There are plans to stage it next year either in the U.S. or in Europe where two or three countries are planning to launch Fellowships similar to the BP International Tennis Fellowship

TV Radio

† Indicates programme in black and white

BBC 1

6.40-7.55 a.m. Open University. 9.38 For Schools, Colleges. 10.45 You and Me. 11.22 For Schools, Colleges. 12.45 p.m. News. 1.00 Pebble Mill. 1.45 Bod. 2.01 For Schools, Colleges. 3.15 Songs of Praise. 3.53 Regional News for England (except London). 3.55 Play School. 4.20 Deputy Dawg. 4.25 Jackanory. 4.40 Hunter's Gold. 5.05 John Craven's Newsround. 5.10 Blue Peter.
5.40 News.
5.55 Nationwide (London and South-East only).
6.20 Nationwide.
6.50 Ask The Family.
7.15 Blake's Seven.
8.10 Panorama.
9.00 News.
9.25 Robert Redford in "Jeremiah Johnson."
11.10 To-night.
11.50-11.52 Weather / Regional News.

All Regions as BBC-1 except at the following times:—

Wales—1.45-2.00 p.m. Pili Pala. 2.18-2.38 For Schools. 5.55-6.20 Wales To-day. 6.50-7.15 Heddiw. 11.50 News and Weather for Wales.

Scotland—10.00-10.20 a.m. For Schools (Around Scotland). 5.55-6.20 p.m. Reporting Scotland. 11.10 Public Account. 11.45 News and Weather for Scotland.

Northern Ireland—3.53-3.55 p.m. Northern Ireland News. 5.55-6.20 Scene Around Six. 11.50 News and Weather for Northern Ireland.

England—5.55-6.20 p.m. Look East (Norwich); Look North (Leeds, Manchester, Newcastle); Midlands To-day (Birmingham); Points West (Bristol); South To-day (Southampton); Spotlight South-West (Plymouth).

BBC 2

6.40-7.55 a.m. Open University.
11.00 *Play School.*
3.00 p.m. Wordpower.
3.30 Children Growing Up.
4.00 Parents and School.
4.35 Open University.
7.00 News on 2 Headlines with sub-titles.
7.05 Children's Wardrobe.
7.30 Newsday.
8.10 Drama 2.
9.00 Harry Mortimer's World of Music.
9.50 Americans.
10.40 Just A Nimmo.
11.10 Open Door.
11.35 Late News on 2.
11.45 Tele-Journal.

LONDON

9.30 a.m. Schools Programmes. 12.00 Noddy. 12.10 p.m. Stepping Stones. 12.30 Indoor League. 1.00 News plus FT index. 1.20 Help! 1.30 About Britain. 2.00 After Noon. †2.25 Monday Matinee: "Background." 3.50 Couples. 4.20 Clapperboard. 4.45 Warrior Queen. 5.15 Survival.
5.45 News.
6.00 Thames at 6.
6.40 Help!
6.45 Opportunity Knocks!
7.30 Coronation Street.
8.00 A Sharp Intake of Breath.
8.30 World In Action.
9.00 Hazell.
10.00 News.
10.30 The Big Film: "Shane." starring Alan Ladd, Jean Arthur, Van Heflin and Jack Palance.
12.40 a.m. Close: Neville Jason *reads a psalm.*

All IBA Regions as London except at the following times:—

ANGLIA

1.25 p.m. Anglia News. 2.00 Houseparty. 2.25 Family. 3.20 Arnie. 5.15 University Challenge. 6.00 About Anglia. 10.30 Wish You Were Here. 11.00 Mystery Movie: McCoy. 12.25 a.m. Reflection.

ATV

12.30 p.m. George Hamilton IV. 1.20 ATV Newsdesk. 2.25 Movies to Remember: "Portrait of Jennie," starring Jennifer Jones and Joseph Cotten. 5.15 University Challenge. 6.00 ATV Today. 10.30 Left, Right and Centre. 11.00 McMillan and Wife. 12.25 a.m. Something Different.

BORDER

12.30 p.m. The Flintstones. †1.20 Border News. 2.00 Houseparty. 2.25 Matinee: "What Are Best Friends For?" 5.15 Garnock Way. 6.00 Lookaround Monday. 6.15 University Challenge. 10.30 Film: The Proud and the Damned." †12.35 a.m. Border News Summary.

CHANNEL

1.18 p.m. Channel Lunchtime News and What's On Where. 2.25 The Monday Matinee: "Killdozer." 5.15 University Challenge. 6.00 Channel News. 6.10 Cartoontime. 10.28 Channel Late News. 10.32 Thomas Hardy—A Man Who Noticed *Things.* †11.30 *Late Night Movie:* "Maria Marten, or Murder in the Red Barn." 12.40 a.m. Channel Gazette followed by News and Weather in French.

GRAMPIAN

9.25 a.m. First Thing. 12.30 p.m. Reardon on Snooker. 1.20 Grampian News Headlines. 2.25 Monday Matinee: "The Night We Got the Bird," starring Brian Rix. 5.15 University Challenge. 6.00 Grampian Today. 6.10 The Mary Tyler Moore Show. 6.40 Help! 10.30 Reflections. 10.35 Feature Film: "The Mercenaries," starring Rod Taylor.

GRANADA

12.30 p.m. How to Stay Alive. 1.20 Dodo. †2.25 Monday Matinee: "The Runaway Bus," starring Frankie Howerd. 5.15 University Challenge. 6.00 Granada Reports. 10.30 Reports Politics. 11.15 Mystery Movie: Banacek.

HTV

12.30 p.m. Gardening My Way. 1.20 Report West Headlines. 1.25 Report Wales Headlines. 2.00 Houseparty. †2.25 Monday Matinee: "Gasbags," starring The Crazy Gang. 5.15 Mr. and Mrs. 6.00 Report West. 6.22 Report Wales. 10.35 The Monday Film: "Deadlier Than the Male," starring Richard Johnson and Elke Sommer.

HTV Cymru/Wales—As HTV General Service except: 1.20-1.25 p.m. Penawdau Newyddion y Dydd. 2.00-2.25 Hamdden. 6.00-6.22 Y Dydd. 8.30-9.00 Yr Wythnos.

HTV West—As HTV General Service except—1.20-1.30 p.m. Report West Headlines. 6.22-6.45 Report West.

SCOTTISH

1.25 p.m. News and Road Report. †2.25 Monday Matinee. "Barnacle Bill," starring Alec Guinness. 5.15 University Challenge. 6.00 Scotland Today. 6.30 Crimedesk. 10.30 The Big Break International. 11.00 Master Golf. 11.30 The Odd Couple. 12.00 Late Call. 12.05 a.m. The Butlin's Grand Masters Darts Championship.

SOUTHERN

12.30 p.m. *Farm Progress.* 1.20 Southern News. 2.00 Houseparty. †2.25 Monday Matinee: "The Monolith Monsters." 5.15 Mr. and Mrs. 6.00 Day by Day. 10.30 Music in Camera. 11.00 Southern News Extra. 11.10 Bill Brand.

TYNE TEES

9.20 a.m. The Good Word, followed by North East News Headlines. 1.20 p.m. North East News and Lookaround. 2.25 Power Without Glory. 3.20 Generation Scene. 3.35 The Little Rascals. 5.15 University Challenge. 6.00 Northern Life. 6.40 Police Call. 10.30 Northern Scene. 11.00 Monday Night Movie: "Whoever Slew Auntie Roo?" starring Shelley Winters. 12.40 a.m. Epilogue.

ULSTER

1.20 p.m. Lunchtime. 2.00 See You Monday. 2.30 Monday Matinee: "Joe Dakota," starring Jock Mahoney. 4.13 Ulster News Headlines. 5.15 University Challenge. 6.00 Ulster Television News. 6.05 Upsquares and Down. 6.30 Reports. 10.30 Two at 10.30. 10.35 Review. 11.05 Lost at Sea, followed by Bedtime.

WESTWARD

12.27 p.m. Gus Honeybun's Birthdays. 1.20 Westward News Headlines. 2.25 The Monday Matinee: "Killdozer" (TV movie). 5.15 University Challenge. 6.00 Westward *Diary.* 6.20 Sports Desk. 10.28 Westward Late News. 10.30 Thomas *Hardy—A Man Who Noticed Things.* †11.30 Late Night Movie: "Maria Marten or The Murder in the Red Barn," starring Tod Slaughter. 12.40 a.m. Faith for Life.

YORKSHIRE

12.30 p.m. Vera, The Beautiful Spy. 1.20 Calendar News. †2.25 Monday Film Matinee: "Barnacle Bill," starring Alec Guinness. 5.15 University Challenge. 6.00 Calendar (Emley Moor and Belmont editions). 10.30 The Savage West: "Macho Callahan" starring David Janssen, Lee J. Cobb and David Carradine.

RADIO 1 247m

(S) Stereophonic broadcast

6.00 a.m. As Radio 2. 7.02 Noel Edmonds. 9.00 Simon Bates. 11.31 Paul Burnett including 12.30 p.m. Newsbeat. 2.00 Tony Blackburn. 4.31 Dave Lee Travis including 5.30 Newsbeat. 7.00 BBC Northern Radio Orchestra (S) (joins Radio 2). 10.02 John Peel (S). 12.00-12.05 a.m. As Radio 2.

VHF Radios 1 and 2—6.00 a.m. With Radio 2, including 1.55 p.m. Good Listening. 10.02 With Radio 1. 12.00-12.05 a.m. With Radio 2.

RADIO 2 1,500m and VHF

6.00 a.m. News Summary. 6.02 Ray Moore with The Early Show (S), including 6.15 Pause for Thought. 7.32 David Allan (S), including 8.27 Racing Bulletin and 8.45 Pause for Thought. 10.02 Jimmy Young (S). 12.15 p.m. Waggoners' Walk. 12.30 Pete Murray's Open House (S) including 12.33 FA Cup Draw for the Sixth Round and 1.45 Sports Desk. 2.30 David Hamilton (S) including 2.45 and 3.45 Sports Desk. 4.30 Waggoners' Walk. 4.45 Sports Desk. 4.47 John Dunn (S) including 5.45 Sports Desk. 6.45 Sports Desk. 7.02 BBC Northern Radio Orchestra (S). 7.30 Alan Dell: 7.30 The Dance Band Days. 8.02 The Big Band Sound (S). 9.02 Humphrey Lyttelton: The Best of Jazz on record (S). 9.55 Sports Desk. 10.02 You've Got to be Joking. 10.30 Star Sound. 11.02 Brian Matthew with The Late Show. 12.00-12.05 a.m. News.

RADIO 3 464m, Stereo & VHF

†6.55 a.m. Weather. 7.00 News. 7.05 Overture (S). 8.00 News. 8.05 Morning Concert (S). 9.00 News. 9.05 This Week's Composer: Glazunov (S). 9.50 Talking About Music (S). 10.20 Michel Beroff piano recital, part 1 (S). 10.55 In Short: talk by Martin Cooper. 11.00 Michel Beroff, part 2 (S). 12.00 BBC Welsh Symphony Orchestra (S). 1.00 p.m. News. 1.05 BBC Lunchtime Concert (S). 2.05 Organ Music (S). 3.00 Matinee Musicale (S). 4.00 Handel, recital (S). 4.35 New Records by Mozart (S). 5.15 Bandstand (S). †5.45 Homeward Bound. †6.05 News. †6.10 Homeward Bound (continued). †6.30 Lifelines: Home and Family. 7.30 Fernando Sor (1778-1839), Bicentenary concert, part 1 (S). 8.15 *Interval Reading.* 8.20 Fernando Sor part 2. 9.05 The [illegible] Tales. 9.35 BBC Symphony Orchestra at the Round House, part 1: Saxton, Maderna (S). 10.10 Interval Reading. 10.15 BBC SO, part 2: Berio. 10.55 Jazz in Britain: Don Weller's Major Surgery (S). 11.25 News. 11.30-11.35 And Tonight's Schubert Song.

Radio 3 VHF only—6.00-7.00 a.m. and 5.45-7.30 p.m. Open University.

RADIO 4 434m, 330m, 285m and VHF

6.15 a.m. News. 6.17 Farming Week. 6.35 Up to the Hour. 6.52 (VHF) Regional News. 7.00 News. 7.10 Today. 7.35 Up to the Hour (continued). 7.52 (VHF) *Regional News.* 8.00 *News.* 8.10 *Today* including news headlines, weather, papers, sport. 8.45 Ray Gosling with the BBC Sound Archives. 9.00 News. 9.05 Start the Week with Richard Baker (from 9.45). †10.00 News. †10.05 Wildlife. 10.30 Daily Service. †10.45 Morning Story. †11.00 News. †11.05 Shipwreck. †11.50 Announcements. 12.00 News. 12.02 p.m. You and Yours. 12.27 Top of the Form. †12.55 Weather, programme news VHF (except London and SE) Regional News. 1.00 The World at One. 1.30 The Archers. 1.45 Woman's Hour (from 2.0) including 2.00-2.02 News. 2.45 Listen with Mother. 3.00 News. 3.05 Afternoon Theatre (S). 4.35 Story Time. 5.00 PM Reports. 5.40 Serendipity. †5.55 Weather, programme news VHF Regional News. 6.00 News. 6.30 What Ho! Jeeves. 7.00 News. 7.05 The Archers. 7.20 From Our Own Correspondent. 7.45 The Monday Play (S). 9.15 Figures in an Autumn Field. 9.30 Kaleidoscope. 9.59 Weather. 10.00 The World Tonight. 10.30 Through African Eyes: Bridget Bloom talks to both black and white people about racial conflict. 11.00 A Book at Bedtime. 11.15 The Financial World Tonight. 11.30 Today in Parliament. 11.45 News.

For Schools (VHF only) 9.05 a.m.–12.00 and 2.00-3.00 p.m.

BBC Radio London 206m and 94.9 VHF

6.00 a.m. As Radio 2. 6.30 Rush Hour. 9.00 Weekly Echo. 9.20 London Live. 11.03 In Town. 12.03 p.m. Call In. 2.03 206 Showcase. 4.03 Home Run. 6.10 Look, Stop, Listen. 7.30 In Town. 8.30 Breakthrough. 10.03 Late Night London. 12.00-Close: As Radio 2.

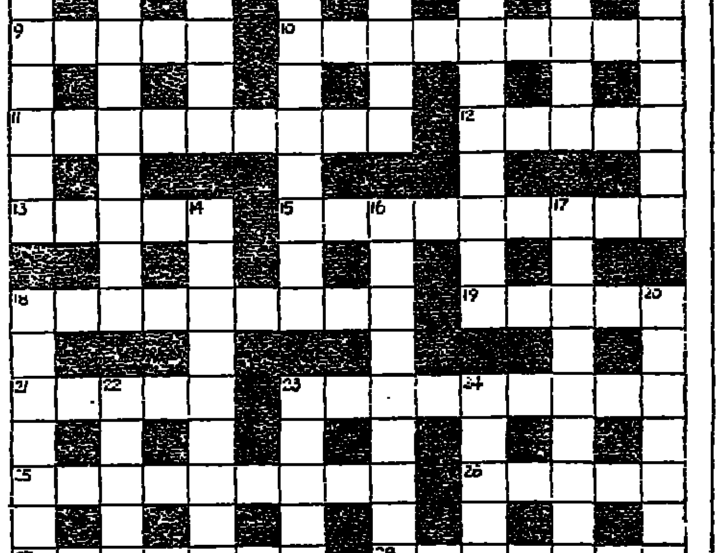
London Broadcasting 261m and 97.3 VHF

5.00 a.m. Morning Music. 6.00 A.M.—non-stop news, travel, sport, reviews information. 10.00 Brian Hayes. 1.00 p.m. LBC Reports including George Gale's 3 O'Clock Call. 8.00 After 8—with Ian Gilchrist. 9.00-1.00 p.m. Nightline.

Capital Radio 194m and 95.8 VHF

6.00 a.m. Graham Dene's Breakfast Show (S). 9.00 Michael Aspel (S). 12.00 Dave Cash with Cash on Delivery (S). 3.00 p.m. Roger Scott with his Three O'Clock Thrill (S). 7.00 London Today (S). 7.30 Adrian Love's Open Line (S). 9.00 Nicky Horne's Your Mother Wouldn't Like It (S). 11.00 Tony Myatt's Late Show (S) including 11.50 Moment of Terror. 2.00 a.m. Peter Young's Night Flight (S).

F.T. CROSSWORD PUZZLE No. 3,598



ACROSS

1 Rides roughshod over a relative by marriage (7)
5 Splendid dwellings for the friends about one (7)
9 Flies aboard when jolly (5)
10 *One of a former era is a winner to a Scot* (9)
11 Fleet Street includes certain strong demands (9)
12 There is obviously courage in the Artillery-man (5)
13 Pen the French article in fashion (5)
15 Picture an usher getting on (3, 6)
18 Dodges promotion among teams (4-5)
19 A card the sailor must return to (5)
21 Indicate there's nothing in the measure (5)
23 Elia's tale could be uncomfortable (3, 2, 4)
25 Method remains with hospital attendants (9)
26 Find me shelter in the affray (5)
27 The opening price for a lintel (7)
28 Is its blossom seen at mock weddings? (7)

DOWN

1 Predicaments associated with rabbits (7)
2 State of Cortez, staring at the Pacific (5, 4)
3 Distress signal includes the right groups (5)
4 "Quoth the raven, '——'" (Poe) (9)
5 Chooses tools for road-workers (5)
6 Richard had a name for courage (4-5)
7 Tea gets round in a far-eastern country (5)
8 Possibly Nor-east member of legislative body (7)
14 For one who seeks credit and the lazy schoolboy (4, 5)
16 Reveals the record is unsuccessful (9)
17 Sailor meets saint in waterproof (9)
18 To have the evening meal with wine is a help (7)
20 The girl brings sex appeal to that place (7)
22 The type of paper for the country (5)
23 "And burnt the topless towers of ——" (Marlowe) (5)
24 I am in a hill and all at sea here (5)

The solution of last Saturday's prize puzzle will be published with names of winners next Saturday.

Kong Arts Festival

Overtures from the Orient

by ANTONY THORNCROFT

ne needs an excuse to ong Ko-g, surely one of st exciting cities in the — visually exciting, ally exciting, physically . The creation, and firm hment, of an annual ional arts festival there another example of the ability to cram every ible experience into its area. It is also an attempt et any visitors deterred g Kong's image as a naking maelstrom. 'estival exhibits all the fficiency typical of the and what it lacks in tion it compensates with The sixth festival ended y and was by conven- standards the most ul ever, not least in box rms, with over 90 per the seats sold. In the e festival has suffered ibiting venues—the City as two auditoria—the one for concerts, the for theatre—but their re solid, and death to ancers. This year the n. Arts Centre is func- giving another arena. he festival director, Chardet, spread his net further to gather in llet Folklorico from the Compagnie Philippe puppet show from as well as the very Bournemouth Symphony a. and productions of *holm, She Stoops to* and *Happy Days*. In there were peripheral ns like the Lucerne Strings, the Charlie io, Hinge and Bracket, Warwick and Chiuchow

e Warwick provided the rsy *which is essential to* ival by infuriating the by singing for only an nd, by all accounts, ng it. London audiences quite so sensitive, and almly such short shrift merican "names," but *ure of Hong Kong is the* f any suggestion that it incial, rather out-of-the- e, a one night stop over av to somewhere. Rather ther performers were applauded even though n seemed to be playing oadly than they would n London.

as especially true of *She Conquer* which can all ly be performed as a . Hardcastle instructing servants in waiting at e scenes of mistaken which ravel up the first lumpish Lumpkin who both a buffoon and the quire—all lend them- superficial laughter, ford Williams' produc- h began life in Billing- *s cheerful rather than* ited. Ralph Koltai's set a collection of props attempt to create any , but at least the of furnishings gave e Hall the appearance n which sparks off the e of the evening. But playing have been quite l—even down to the unfurling of the sign of a horse as added decor? The play might have been presented during the first days of the new Chinese *Year of the Horse, but even so.*

What redeemed the evening was the enthusiasm of the actors for their caricatures. Martin Jarvis is perhaps happier as the stiff Young Marlow, eyes cast down in front of ladies, than the lunging Marlow after barmaids, but he handsomely looks the part and Diana Quick is a charming Kate Hardcastle. But for once the older generation play more at ease, John Savident being completely sympathetic as Hardcastle and Phyllis Calvert adapting superbly to the conditions as his wife. Tony Lumpkin is an ungrateful part but Gerard Murphy is right in playing him less as a clown and more as a spoilt, but ultimately worthwhile, Prince Hal-type.

A different company of actors had a harder time of it with *Rosmersholm. Although written* more than a century after *She Stoops*, Ibsen's most dismal play seems light years more removed from our own experience. That such apparently intelligent people should behave so bizarrely is beyond the comprehension of a modern audience and it is all but impossible to take the plot seriously. And yet Ibsen's genius succeeds in leaving you despondent rather than hysterical at the double suicide climax. The production had earlier been seen in London (with a more illustrious cast) and the set only travelled marginally well: it was another Williams-Koltai effort and although the diaphanous backdrop of oppressive forest is imaginative it is not used to full effect. Michael Culver makes *Rosmer a weak character* and you hardly think him capable of the passion of his end: Joanna Dunham speaks, and looks, beautifully as Rebekka West but was not quite at ease with the part. It was indicative of theatre in Hong Kong that Frank Middlemass won the *ovations as* the drunken Ulrik Brendl, the dissipated former tutor of Rosmer. He over-acted the rest of the cast off the stage. Still both productions were very worth while. They may not have been the most inspired choices but at least they gave the local theatre going public serious classics, professionally done, if lacking a touch of magic.

The commercial hit of the festival was undoubtedly Hinge and Bracket who packed out the small theatre at the Arts Centre. Their musical nostalgia and pointed double entendres are just the stuff for expatriates, who lapped it up. As a very early fan of those two skilled actors George Logan and Patrick Fyffe who have created two most lovable monsters in the pair of refined musical ladies, I felt that they are rather dragging out the material: what began as a wonderful skit is rapidly becoming institutionalised. The singing is fine; the acting is fine; but they are tending to camp it up with *the reminiscences* — something which it is all too easy to do, even by reviewers.

I missed the next production at the Arts Centre theatre, *City of Broken Promises*, a musical set in 19th century Macau and a completely local creation. *Indeed it was billed as Hong* Kongs' first musical and was a great success. It is in such ventures that the impact of the festivals can be felt. Six years ago the arts were, if not a dirty word, at least an unconsidered trifle in Hong Kong, attended, if at all, for social rather than mental pleasure. There was also a great divide between the European and Chinese cultures. Now there is a flourishing Hong Kong Philharmonic Orchestra as well as half a dozen chamber orchestras. *Music is, of course, the* easiest of the arts to *bridge the* cultural divide and the audiences for the Bournemouth Symphony were large and mixed. The great interest in classical music in Hong Kong today owes *much* to the festival, and it was good to see a mainly Chinese choir tackling Faurés Requiem along with the Bournemouth Symphony under the control of Paavo Berglund. There was an obvious disparity in the professionalism that voices and instruments took to the task but it was a commend*able venture and the orchestra* was in marvellous form, as it was, apparently, throughout its stay.

No one need now worry about the state of the arts in Hong Kong. Next year's festival is being planned at the biggest ever *and in a few years a new cultural* complex to due to open on the other (Kowloon) side of the harbour to ensure that the facilities available can match the ambitions of the planners: at the moment the halls are not flexible, or large enough, to cater for the most ambitious arts—such as opera (although the various varieties of Chinese opera are enjoying a revival, again stimulated by the festivals). Although the Arts Centre is used as a venue during the *festival its contribution is much* more to the permanent cultural life of Hong Kong: its site and structure (it soars up 17 storeys) on a land-hungry island creates a challenge but under Neil Duncan, an ex-Arts Council executive, it offers around a thousand events a year. So in a very short period of time Hong Kong has established an international arts festival, at a quite reasonable cost for such a wealthy place. It is a festival which rarely breaks new ground but which is always interesting, and it is an arts festival which has stimulated a new confidence in the cultural life of the colony.

Peggy Leder

George Logan as Dr. Evadne Hinge and Patrick Fyffe as Dame Hilda Bracket

Covent Garden

Mayerling II

by CLEMENT CRISP

On Friday night there came the first change of cast in *Mayerling*, Wayne Eagling leading a new group of principals as a palely haunted, nervously intense *Rudolf. With his* beautiful style (beautiful in its speed, musicality, largeness and ease of articulation, and clear musculature: one can see how movement develops, how energy is born and expends itself) Eagling is an artist who can justify a role merely *by his* dancing. This is the case with his Solor, his Florimund. In dramatic ballets he needs incident to fire his imagination: his Romeo and des Grieux have a density of emotional texture which I do not find in his account of the more *static role of Siegfried in Swan Lake.*

Thus the Crown Prince Rudolf is well suited to his gifts, and his view of the part on Friday night, if understandably a first sketch, was given a magnificent dynamic impetus which took Eagling without apparent trouble from the opening wedding celebration to the final suicide. The dancing was thrilling—I admired especially the cutting neurotic edge which he gave to certain of the big scenes, the duet with Stephanie, the variation in the tavern, the tormented solo with Elizabeth in the Hofburg, showed character exactly expressed—and he suggested all the corroding loneliness that drives Rudolf further and further along the way to the Hunting Lodge.

What was underplayed, and seems to me crucial to Rudolf's character, was the sexual force of the last scene with Mary Vetsera. Wall/Seymour make physical passion a fevered manifestation of the *folie à deux* that consumes the lovers; Eagling and Lesley Collier (the Vetsera of the performance) miss something of the hysterical abandon that *should* mark their farewell to *passion* and to life. Further performances will also enable Eagling to explore the long moment of immobility in the Hofburg party scene — the still eye of Rudolf's storm—when, during the second and third stanzas of the song, we must be able to "*read*" *the Prince's face. (I am* not persuaded that the beard Rudolf wears suits Eagling here.) But at every other moment Eagling is the true focus of the action: his performance touched with an introspective pathos even at his most desperate and ferocious moments. It is a very fine achievement.

A second cast, taking over major roles so soon after a première, must inevitably suffer from comparison with performances freshly made and still fresh to an audience. It is for this *reason, perhaps,* that I found depths of characterisation are as yet unplumbed by Vergie Derman and Ann Jenner as Elizabeth of Austria and Countess Larisch.

Lesley Collier's Mary has all the fresh eagerness the role needs, and she manages its girlish extravagance with complete conviction. But like MacMillan's Juliet, Mary must awaken to sexual feeling and respond vividly to it: at this first performance Collier's crystalline dancing seemed too pure, too virginal for the final burst of eroticism that preceded her death.

The production has now played itself into the theatre, and it has, for me, gained in speed. A section which I have heard described as a "longueur"—the Emperor's birthday party with its song—I think essential in that it allows Rudolf to reveal a great deal about himself. Cuts *are needed: the snow-scene;* the tavern sequence; a reprise of the opening waltz (splendidly organised though it is) are over-extended. What remains rather more puzzling is the awkwardness of certain scene changes: there are long moments spent *staring at a darkened front* cloth, a mis-judged lighting cue at the end of the penultimate duet of the ballet when we *must* be allowed to see the faces of the lovers, the all-too-visible way the set is stuck after the suicide—these need reassessment by the *stage management. But as a* ballet *Mayerling* grips the imagination and tightens its hold with successive viewings: editing will but sharpen its impact still further.

Glasgow Citizens

No Orchids for Miss Blandish

by MICHAEL COVENEY

Recognising the problems of transferring James Hadley Chase's classic thriller to the stage, Robert David MacDonald starts his version with Miss Blandish flat on a trolley in winding sheets and a face-pack. Already the girl has no chance, and when she dons the diamonds she mutters unhappily about her restrictive social whirl. The manicurist—who just happens to be Anna Borg, the stripper who eventually falls in with the Grisson gang—recoils in fake wonder at the necklace. A saxophone wails as tuxedo-clad hood*lums bicker among themselves.* The Grisson gang snatch Miss Blandish and the jewellery after wiping out their rivals in a country shack.

There is little fat on the bone of Chase's original (in either the 1939 model or the less-flavoured 1961 re-write) so once you lose the cars and the heat of reckless pursuit, a whole dimension disappears. In addition, Mr. MacDonald presents Ma Grisson as running the show *from a cocktail bar: a bullying, sophisticate who, in the person* of Sian Thomas, swings around the stage like a butch prison warder. Not at all like Chase's foul old bag, though suitably grotesque in her own way. The price is small, though, for the show succeeds on its own terms, creating an atmospheric shadowy underworld: Geoff Rose has designed a back wall covered in posters advertising cigars and candy bars and the locations are either trucked on or conjured by lighting.

The chief design success is the white box where Miss Blandish is imprisoned. At first, she is alone with a naked bulb and a bare bed, but as the hideously psychopathic Slim Grisson (Peter Jonfield) is urged on by Ma to despoil his drugged captive, the room is decorated with a lampshade, a gramophone, a small curtain-wardrobe and a religious picture. Pauline Moran plays the gibbering victim with frightening panache. Once the ransom money has been received, Slim gets his way, and the first half ends with an extraordinary tableau as Ma oversees Slim's sobbing, apologetic rape scene to the accompaniment of Gounod's "Ave Maria." One or two people in the stalls on Fri*day night became quite upset.*

In the second act, Anna falls out with her gangster lover, and the private dick Fenner (David Hayman) finds a lead by posing outrageously as a showbiz agent. Fenner is operating at the behest of Mr. Lucie who, in turn, is acting for the millionaire Blandish. The Fenner-Lucie relationship, one built on mutual loathing and a little sexual needle, is wholly the creation of Mr. MacDonald. It works well, placing the grisly shoot-outs in almost comic perspective and shaping the entire play around the figure of Fenner as a self-regarding loner, with more collar than choler.

Garrick

Side by Side by Sondheim

by Michael Coveney

Any among you who have not followed the advice of Clive Barnes (or, for that matter, Sheridan Morley) and not seen this pleasant, jumped-up cabaret at least fifty-four times, will be relieved to learn that it is still worth a visit, if only to hear an excellent trio strike hard at the heart of Stephen Sondheim's marvellous songs. I am still uneasy about the preachy format to the show as Robin Ray (in the compere's role initiated by Ned Sherrin and recently occupied by Russell Harty and Bernard Braden — did no one think of asking Sheridan Morley?) gives dry biographical details about Sondheim the dramatist breaking the barrier of song-writing.

Jill Martin and Julia Sutton now sing the numbers originally sung at the Mermaid in May 1976 by Millicent Martin and Julia McKenzie. I miss Miss McKenzie's frantic tremolo in "Broadway Baby" but Miss Sutton bursts forth in fine, brassy conclusion. And Eric Flynn, replacing David Kernan, sings every bit as well but with less obvious camp; I doubt if even Alexis Smith on Broadway brought more caustic bite to "Could I Leave You?" than does Mr. Flynn. Both songs are from *Follies* which never made it, alas, to London. Nor did *Pacific Overtures* and we are the more reminded of our misfortune by the company's rendition of "Pretty Lady" than by Robin Ray's quotation from Alistair Cooke on the subject.

Company and *Follies* are still the best represented shows, the *former isolating the curiously* affecting misogynist streak in Sondheim (Eric Flynn, who was in the original London company, gives a superb interpretation of "Being Alive," the sexual loner's *cri de coeur*); the latter, his plaintive, elastic way with themes of showbiz nostalgia. You will not, quite literally, hear a better tumult of lyrics in any other current West End show. You may, on the other hand, find many more dramatic occasions.

For Sondheim *aficionados*, numbers are still included from *Anyone Can Whistle, Do I Hear A Waltz?* (music by Richard Rodgers) and *The Mad Show* (music by Mary Rodgers). The setting is tubular cool with lights, the piano accompaniment excellent.

Poetry Society secretary

Michael Beckerman has been appointed general secretary of The Poetry Society following the resignation of Robert Vas Dias to pusue his activities as a freelance writer and editor.

al Hall

Vienna Philharmonic

by DAVID MURRAY

gnificent sound of the rchestra on Saturday aced the usual envious thing like that collec- g tone, deep, full and ous, is to be heard in Festival Hall. By n London strings— very special occasions *ned to sound ropey; if* roduce such burnished y, the circumstances of ing here rarely let concert was of course event: any appearance the Vienna Philhar- *something like a state* they had Leonard to conduct them. But ity of the playing n ingrained style, not once-in-a-season effort.

layed Beethoven, the d Third Symphonies. *s readings of the works* trating and balanced, noticeable idiosyncra- his own performance trained. In many pas- was satisfied to let the run on automatic to speak, signalling *and there for a* special emphasis. No continuous exhortation, but sudden whole-body gestures recalled the stop-flash technique of Balanchine's Webern ballets.

He secured, nonetheless, a sustained blaze in the finale of the "Eroica" which rightly brought the house to its feet, and at a proper "Allegro molto" which exorcised notions of the merely monumental. The opening Allegro was seamless, though superbly argued: the *Marcia funebre* had assured breadth, but much detailed delicacy too, and the Scherzo was as unforced *as it was swift and vital. In this* work the wind section—Bernstein chose to use quadruple woodwinds—came into its own. Solo display is hardly called for, but they fulfilled Beethoven's demands (and Bernstein's) roundly and stirringly — the *horns in particular had all the* triumphant sonority one had hoped for.

In the D major Symphony, the supernumerary winds were a doubtful asset. Except in fortissimo, four reeds are not necessarily more piercing than *two, only denser and less* pointed. From my (excellent) seat, they tended to disappear under their warm blanket of strings, and such dialogue between the different bands as the Symphony offers was often unequal. These days, surely, the average concert-goer no longer expects Romantic-size orchestral sound as the norm. I fancied that Bernstein was trying to elicit a crisper, nervier performance from his monster forces than emerged: what we heard was impressively secure and clean-lined, but a trifle bland.

Birmingham Art Gallery

Allegri Quartet

The Birmingham Chamber *Music Society would appear to* be the *model* of a vigorous institution of its kind. With 400 seats at its disposal in a pleasant concert hall, it has a full 400 members—and a waiting list. Hopeful non-members habitually queue, as they did last Saturday, *to occupy such seats as members* may chance to leave empty. Faint hearts on London's South Bank may cleave to the familiar, but here a full house greeted a programme consisting of one quite new work and two somewhat rare classics.

The performers were the Allegri Quartet, with a new work *by John Joubert of the Univer*sity of Birmingham's music department. To use the current curious phraseology, his String Quartet No. 2 was "commissioned by the Society with funds provided by the Arts Council of Great Britain." (In former days, *to commission a work was to* pay for it yourself.) Lasting some 25 minutes, it is music which argues thematically, in a traditional way, and uses as its motto the 'Muss es sein?' theme from Beethoven's Quartet, Op. 135.

In four movements, it is fluent, resourceful, and well varied in sound. It has, moreover, that rare quality which one may call musical wit (reminding me of Alan Rawsthorne), by which a composer swiftly confronts you with something which is unexpected *but strangely logical.* Thus when, after three rather dissonant movements, the fourth begins with relaxed jollity in a major key, it seems no capricious act but a clever, convincing permutation.

I think it unfortunate that *this particular "trick" is worked* twice, the tune returning later. But the whole work is a welcome addition to the steady and estimable output built up by Mr. Joubert over the past 20 years. By accident or cunning plan, it was well paired with *Mendelssohn's* Quartet in A minor, where similarly a pre-existent theme (from one of the composer's songs) turns up recurrently throughout.

In personnel, the Allegri Quartet has undergone several successive changes, though not yet recalling the proverbial "old bicycle" of which only the bell is found not to have been renewed. The present members, well matched, are Peter Carter, David Roth, Prunella Pacey, and Bruno Schrecker. Miss Pacey's predecessor as viola player, *Patrick Ireland*, rejoined the group for Mozart's Quintet in D, not so often played and not so deeply touching as the Quintet in G minor, but, nevertheless, serving admirably in this performance to round off a stimulating concert.

ARTHUR JACOBS

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Monday February 20 1978

A chance to kill the Bill

THERE CAN be little doubt that if the House of Commons were allowed a free vote on the Third Reading of the Scotland Bill this week, the Bill would be roundly defeated. It has been clear for many months that the *House as a whole either does* not like the Bill, or has no interest in it. In fact MPs tend to divide into three groups on this issue. The large majority simply show their dislike or lack of interest by declining to turn up for debates, except when it comes to crucial votes on which they tend to follow the party line. There is a minority which is passionately against the Bill and which has shown, by rigorous attendance, that it is possible to amend it almost at will. And there is another minority, mainly consisting of the Scottish Nationalists, which is in favour of the Bill, but only as a stepping-stone on the road to independence.

Bitter

It is also clear — even more so now than it was at the start — that the Bill has major defects. There are certain key *questions about it which have* not been answered, and which are perhaps incapable of being answered. For example, is it conceivable that a Scottish Assembly would rest content without the power to raise revenue? Yet no satisfactory way of allowing independent revenue-raising has been found. No way has been found either of reconciling the proposed new level of Government with the existing regional and district authorities: it is arguable that Scotland is already over-governed and cannot possibly be helped by the addition of one more tier.

Not least, there is the so-called "West Lothian question": what are to be the powers of Scottish MPs at Westminster in relation to English affairs when the powers of English MPs in relation to Scottish affairs have been reduced? Again, no answer has been produced, even though it is not difficult to imagine the outcry that would arise if, after devolution, a Government that relied for its majority on Scottish Members attempted to impose its way on purely English matters.

For those reasons alone, the Scotland Bill is a bad Bill and ought to be defeated. What is more, the majority of MPs know that it is a bad Bill, and almost certainly would defeat it if they voted according to its merits. And yet other considerations persist. These can be divided into the respectable and the disreputable.

The respectable case for allowing the Bill to go ahead is that there is a perceived demand in Scotland for something that falls short of independence, but goes beyond regionalism. The Assembly might be the answer. At the very least, goes the argument, the Scottish *people ought to be given* the choice and, given the 40 per cent. clause, they can have the Assembly only if they vote for it in great numbers, which is a *way of hoping* that they will not.

The trouble with that course, however, is that it stores up trouble for the future. The 40 per cent. clause will make the referendum campaign even more bitter, as the SNP strives to bring out the vote and at the same time alleges that the rules have been rigged. What will happen if the majority falls just short? And even if the majority is adequate, the objections to the deficiencies of the legislation would remain.

Confidence

The disreputable case for supporting the Bill is that the Government believes that it must do something to buy off Nationalist support in order to maintain its position in Scotland. Even if that reading were correct, it would be only at the price of more trouble ahead. Mr. Callaghan is rightly not making the vote an issue of confidence: he can afford to lose without being driven immediately to the country. Safe in that knowledge, Labour MPs who are aware that the Bill is dangerous can afford to vote against.

China buys Japanese

THE MOST *immediately* striking aspect of the new $20bn. two-way trade agreement between China and Japan is that the Chinese leadership now has the confidence and authority to make long-term commitments which run against the grain of much recent policy on the export of natural resources and the purchase of foreign technology. For eight years is a long *time* in the political life of a nation with as turbulent a recent past as China.

The agreement also reflects Japan's confidence that the new Chinese leadership has the power to carry it through. As a result of the deal the Japanese will be looking to China as a continuing supplier of oil and will *now have* to invest in expensive refinery equipment to remove its high wax content. The Chinese have not agreed such a *long-term* trade package since the planned equipment purchases from Russia in the 1950s. Ironically, it is the Russians who have most reason to be worried by the new deal with Japan. For the agreement promises an unwelcome increase in China's industrial strength, *and could pave the way for a* Japan-China treaty in which the Chinese are anxious to insert an anti-Russian clause that would stipulate that the two sides would oppose the attempts of another power (Russia) to seek hegemony in the region.

Unclear

From the conflicting accounts of the agreement it is still unclear whether it marks an addition to existing trade or whether China's current sales of oil and Japan's of steel have been included. But the integrated steel mill that China will obtain at Shanghai, the modernisation of two existing steel plants, the fertiliser and petro-chemical plants all present significant additions to China's industrial capacity and technology in areas where at the moment there are considerable shortages. The further attraction to China is that it would have had difficulty in finding $10bn. of foreign exchange to finance its side of the package outside the framework of a barter agreement with Japan.

The major constraint on any expansion of China's trade remains its lack of adequate foreign exchange. Exports of manufactured products are limited by the depressed state of world markets and the barriers of protectionism as well as by the growth of domestic consumer *spending that will come with* rising incomes. There is *also* no great demand overseas for China's oil or non-coking coal —the most readily exportable of its natural resources— because of either its quality or transport difficulties. Thus in the Pacific region, at least, Japan, anxious to diversify its energy supplies and merely a shuttle service distance away, is the only obvious partner.

Prices

The agreement says that the barter trade will take place at prevailing international prices. The chances are that the Japanese, who have already sold steel to China at about 20 per cent. below international prices, are selling more cut-price steel and equipment. The incentive to do so is the magnitude of new orders for their depressed plant and steel industry—orders that will hopefully relieve pressure on Europe. Also they will be establishing their presence in a great trading centre that could become immensely valuable if China does fulfil its ambition of becoming a major industrial power.

There is little the Russians can do to prevent the drawing together of these two major Far Eastern countries. They have already told the Japanese of their hostile attitude to any friendship treaty that did include an "anti-hegemony" clause. The Japanese response in public has been to point out what they regard as Russian intransigence in the territorial disputes over the northern islands, which is holding up a peace treaty between Tokyo and Moscow. But the Japanese have no wish to incur the long-term anger of the Russians, who are also potential major suppliers of energy. In the coming months there is likely to be a lot of delicate negotiation by Japan either to tone down the "anti-hegemony" clause or to make a parallel peace treaty with the Russians.

The Post Office's dilemma over 'System X'

BY MAX WILKINSON

THE Post Office's latest attempt to persuade more people to use the telephone highlights the way in which its move into the computer age threatens to produce a conflict of interest between its subscribers and its suppliers.

On the one hand, the companies which supply exchange equipment and employ 65,000 people desperately need the Post Office to move quickly into a new computer-based switching system. The speed of the Post Office's change will largely determine whether they have a suitable product to catch the world markets in the 1980s, and whether they can keep their labour force at reasonable levels. Because of the huge costs involved, *Post Office sponsorship* is the key to their development programmes. On the other hand, the Post Office has to consider the interests of subscribers in keeping costs, and therefore tariffs, as low as possible.

The multi-billion-pound investment needed to replace the present Victorian technology with computerised equipment is certain to push up telephone charges *if* it proceeds too fast. For the Post Office "too fast" means faster than the rate which can be justified by the expansion of the *system* and a *normal* replacement programme for old exchanges.

But the *manufacturers*, who are already at least five years behind their foreign competitors, need the fastest possible development followed by substantial home orders to provide a credible base for exports.

Unfortunately, there is no *magic formula* which will match the rate of investment determined by the Post Office's traditional criteria and the speed of development which the manufacturers must achieve if they are to obtain any place at all in the world market. Indeed the rate of expansion of *telephone traffic* has slowed down to about 4 per cent. a year, only about half the rate of the late 1960s. And much of the old electro-mechanical Strowger equipment in the system will remain serviceable for many years to come, even though it has now been made *obsolete* by *computer* technology. These Strowger switches still make 86 per cent. of telephone connections in the U.K.

The Post Office is therefore faced with a major dilemma. How is it to justify investment demanded by the worldwide revolution in switching technology if the scale of investment is not strictly "needed" by subscribers? It is a dilemma which the Government has so far given no signs of understanding. Indeed, its decision last year that the Post Office should hand back £100m. "excess profits" as a £7 rebate to each subscriber demonstrated a narrow short-term view of the industry.

Ironically £100m. is the sum allocated for the development of the new "System X" on which future export hopes must be pinned: "System X" is the code name for the fully digital computerised range of exchanges expected to be introduced into service in the 1980s.

The most obvious way the Post Office can hope to match its investment programme with the needs of manufacturers is to try to stimulate demand for the telephone service. If demand for telephones is expanding rapidly the System X programme will be justified and even accelerated by the Post Office's own need for new capacity.

These considerations undoubtedly lie behind the statement of Sir William Barlow, the new Post Office chairman, that he wants to see faster growth in both the domestic and business telecommunications sectors.

At the same time the Post Office has found itself, like it or not, at the centre of discussions about how to tailor its new digital computer controlled exchanges to the needs of foreign customers.

There are signs now that the old Civil Service approach is *gradually giving way to* the need to become part of what might be called "U.K. Telecoms Incorporated," an amalgam of interests between the public service and the private manufacturing sector.

Since the 1950s, the Post Office has made a series of *disastrous decisions* which left the General Electric Company, Plessey and the U.S.-owned Standard Telephones and Cables at least five years behind their overseas competitors.

Huge contracts for Saudi Arabia, Australia, Korea and elsewhere have been contested *in the international arena*, while British companies watched helpless from the sidelines, or at best tried unsuccessfully to enter on the coat tails of a large U.S. supplier.

All these contracts have specified the new type of "stored program control" (SPC) switching. *This is a radical advance* on the Strowger electro-mechanical switches which date from the nineteenth century. Even the most advanced British electronic exchange, the TXE4 does not have computer control.

Following the introduction of stored program control by Bell in America in May 1965, several European systems have been developed. Ericsson of Sweden produced the successful AXE system, Philips has the PRX and ITT produced Metaconta. In addition Siemens of Germany is developing the EWS 1 and Fujitsu and Nippon Electric in Japan have the DEX 2 and 10. The Post Office's answer is System X, which combines computer control with a new *type of digital switching.*

However, the Post Office has been engaged in what seemed an interminable round of discussions and squabbling with its suppliers about the basic conception of System X. These talks started in 1972, yet it was only last summer that some development contracts were officially awarded, and it will not be until at least the early 1980s that the new exchanges are in operation. The development contract for large urban exchanges has still not been announced. Manufacturers have been worried not only by the slowness in awarding the development contract, but by the Post Office's reluctance to give any firm commitment about the size of orders it will place for the new equipment. However, it does now appear that a sense of urgency has crept into the programme. Next month for the first time, the Post Office is expected to release some details of how the hitherto secret system will work. Sir William has also promised that firm orders for production exchanges will be placed shortly, probably by the end of the year.

A computer controlled network is *immensely* complicated and decisions on the basic framework or "architecture" are of crucial importance to its eventual success. On the other hand Ericsson of Sweden, which won the Australian and half the Saudi Arabian contracts, took only five years to develop its own AXE system. It now looks as if System X could take twice as long.

The change-over to a computer controlled system is not required merely to keep up with international fashion. The invention of stored program control was one of the most *important* developments in the history of telecommunications. It offers the prospect of a cheaper, more efficient and much more flexible telephone service. The Post Office will certainly need it at some stage, partly to cope with expansion—for one thing it takes up far *less space*—and partly to replace the outdated Strowger gear.

The difficulties of designing a computer controlled network are enormous, and there have been a number of disasters in the early stages of most systems. Large numbers of different pro*grams in large numbers of* exchanges are all using the network at once to control thousands if not millions of simultaneous conversations. Unless the greatest care is taken the bleeps generated by the different programs all start getting mixed up and different routines start interfering with each other.

After an initial failure with what is now described as "spaghetti programming," Ericsson of Sweden pioneered a rigid modularity which means that every part of the system is completely self contained and isolated. This produced the AXE exchanges which are now acknowledged to be reliable and efficient, even though the approach led to a great deal of duplication.

So far most of the computer controlled or Stored Program Control systems — including AXE, Philips's PRX and ITT's Metaconta—combine computer control with the more traditional reed relay mechanism for actually connecting calls. Telephone conversations are still carried by ordinary electric currents which follow the pattern of sound waves.

System X aims to leapfrog these developments to a new type of digital switching which can be carried out within the computer on microscopic electronic switches. Such switches *can operate extremely fast* and require very little maintenance: Dr. Kenneth Corfield, managing director of Standard Telephones and Cables, estimates a fully digital exchange in ten years' time will occupy about a thousandth of the volume of traditional exchanges and require about a tenth of the direct labour in manufacture.

Apart from the gains in speed, size and eventually in cost, there are enormous advantages in flexibility. The computer can be constantly searching for an unengaged line. Different parts of a conversation may go by entirely different routes without the subscriber noticing any imperfection.

Initially only the larger exchanges will be fully digital, with conversion apparatus at either end. Gradually System X will be extended as an "overlay," to the existing exchanges, until eventually the conversion to digits will probably take place in the subscriber's own telephone.

At present the only company to have a substantial number of *fully digital exchanges* in service is the giant AT and T in the U.S.

One of the major uncertainties about System X is whether the formidable difficulties of stored program control and of digital switching can be overcome by the research teams in one *simultaneous jump.*

On this point, Plessey, for example, is moderately optimistic. It points to the successful development of the British military communications system called Ptarmigan, which is fully digital and computer controlled.

On the other hand the record on System X so far is not encouraging. The Carter Committee reported: "The situation as we have found it causes us the gravest misgiving. The three manufacturers are not a natural team. *In particular, the British* owned firms (GEC and Plessey) are suspicious of co-operation with the American owned STC.

"The project is falling behind schedule retarded by a complex apparatus of committees and discussions. Minor details, we are told, pass upwards for consideration at high level in the Post Office. Crisp and final decisions on specifications are difficult to obtain."

These delays are occurring at a time of unprecedented advance in component technology. Computers the size of a filing cabinet in 1972 will be etched onto silicon smaller than a postage stamp in a few years time. Prices of processors and memories are continuing to tumble, while their reliability increases. Consequently designs which have too long a gestation period risk being obsolete before they are tested. To be in the race at all, manufacturers must be continually jostling among the leaders.

But in spite of its advanced concept, System X is in development terms, half a lap behind,

THE DIFFERENT TYPES OF SWITCHING

● **STROWGER**, or "step by steps" switches invented in the last century and still manufactured, are reasonably reliable and efficient, but slow in operation and expensive to maintain. The digits dialled on the telephone receiver send pulses down the wire which activate electro-mechanical switches one after another until a complete connection is made. A delay between dialling and connection is inevitable while the switches are setting up the call. Contacts must be cleaned frequently and the mechanism kept free from dirt. Strowger exchanges are bulky and require intricate wiring networks between racks of switches.

● **CROSSBAR** was the next development of switching technology widely introduced in many countries during the 1950s and 1960s, but not to any great extent in the U.K. where the Post Office made a disastrous attempt to leapfrog into the electronic age. It consists of a grid of horizontal and a grid of vertical bars which both have switch contacts at the crosspoints. Contact is made at only one crosspoint when a vertical and a horizontal bar is given a half turn. Crossbar exchanges are more compact than Strowger and allow more rapid control of switching sequences.

● **REED RELAY**—The most recent development in conventional switching has been to replace the mechanical bars and switches with miniature metals springs or "reeds" enclosed in glass bubbles. An electro-magnet wound round the bubble pulls the reeds together to connect speech paths. Reed relay exchanges are still smaller than Crossbar, and, because the switches are enclosed, require less maintenance.

● **STORED PROGRAM CONTROL**—(SPC) is the use of computers to control exchanges. In traditional systems, the dialled pulses *are used directly to open* and close switches to connect calls. In the most modern of these systems, sophisticated electronics interpret these pulses and re-transmit them to the various exchanges through which the call will pass. SPC, however, replaces these control mechanisms with a computer. The number dialled by a caller goes straight to the computer, which calculates the best route for the calls and sends out appropriate instructions to the switches.

This system is faster and more flexible, because the computer can instantly calculate the best route for a call when the lines are busy. The computer can provide many extra facilities and allows changes—like disconnection of a subscriber—to be made by a simple instruction from a keyboard rather than the physical alteration of wires in the exchange.

From the subscribers' point of view, SPC is capable of providing a range of new services, in fact many of the services at present provided by a personal secretary. For example the telephone can be instructed by punching in the appropriate code: "Do not allow any incoming calls until 4 o'clock, *except if* Mr. X rings." It will allow calls to be transferred automatically to another number, and if a number is engaged, can automatically ring back as soon as it is free. Because such services are controlled by computer programs, they can be altered or expanded relatively easily from a central office, and different subscribers may choose to have different facilities.

● **DIGITAL SWITCHING** represents the complete integration with computer technology. SPC is only a computerised way of controlling switches. Speech is conveyed between telephones by ordinary electrical currents (analogue signals) which exactly mirror the *vibrations of the voice. In a* fully digital exchange, however, these analogue currents are converted into a series of "digits" or bleeps. The bleeps are the same as the signals used by computers for their internal operation. Conversations coded in a digital form can *therefore* be routed to *different* destinations by an internal switching system within a computer. These switches are millions of times faster and millions of times smaller than the older electro-mechanical switches. Moreover they are connected on *tiny micro-circuits* with *hardly* any wires between them.

● **PRESENT SYSTEMS**—All existing SPC systems in Europe including Ericsson's AXE, Philips' PRX and ITT's Metaconta combine computer control with analogue switching, mainly using reed relays. The British Post Office's System X will combine SPC with digital switching, *although analogue* exchanges may well be incorporated into the system in the early stages.

MEN AND MATTERS

Keep smiling in Whitehall

Naturally enough, inflation has left its mark on the cost of the Prime Minister's own staff, as upon wages everywhere. In a written answer in the Commons last week, Mr. Callaghan disclosed that in 1974 the total bill for such staff was £234,000, whereas in 1977 is was £435,000. The numbers were much the same — 71 last year compared with 68 three years earlier, but only one part-timer instead of three.

So the average pay of prime ministerial aides has gone up from £3,441 a year to £6,126. The latest figure may seem quite a lavish average to the man in the street, but then one cannot blame Jim for wanting the best. But it does represent an increase of 78 per cent. The average national wage in April 1974, was £41.70 a week: in April 1977 it was £70.20. That was an increase of 68 per cent. Nice to know that Downing Street is setting such a good example to us all.

Bosses' boss in France

If the French left wins next month's elections, the view from the top floor of number 31, avenue Pierre I de Serbie, will be distinctly murky. It is perhaps because of his talent for feeling his way forward in gloomy surroundings that Francois Ceyrac has been unanimously reappointed head of the national employers' federation, the Patronat, for an unprecedented third term. Since 1973 he has managed to steer between the aggressive small business lobby and the big conglomerates heavily represented on the Patronat's governing body.

"Now Jim is threatening a 'Buy British (Scottish Excepted) Campaign'."

Ceyrac has also maintained a dialogue with government and unions about industrial and social reform. Now 65, and with *a deeply-lined face*, he was born in the Correze, a poor region of south-central France. Since the murder of his German opposite number, Hans-Martin Schleyer, he has had a bodyguard on presidential orders.

Predictably, Ceyrac has been bitterly condemning the economic programmes of the Left-wing parties. But he is also warning the present government that it must stimulate faster industrial growth to combat unemployment among the young. Whatever happens at the polls, the man the French papers call the "boss of the *bosses*" *is certain to find his* third term the toughest of them all.

Don't call us—we'll call you

The Post Office has shaped up to the looming menace of "sequential diallers," to which I drew attention early last December. This is the U.S. innovation whereby advertisers can call every number on an exchange *to deliver a sales message.* The Post Office told me that they had never heard of it and while being sceptical would not like to offer a premature judgment. John Cartwright, a Labour MP who specialises in consumer affairs, has now won an assurance that the "telephone terror" will *not* be allowed *into* Britain.

Just in time. Up to 27m. calls a day are being made in the U.S., delivering a variety of four-minute *spiels* according to which advertiser has bought time on private lines. Until the message ends you are unable to dial out—one subscriber has stirred public anger by telling how she could not call a doctor for several minutes when her mother had a heart attack. The State of Illinois is now leading a nationwide drive to have computer-based sequential dialling made illegal.

Light on lead at Lloyds

Heavenly harmony has been restored between the London Metal Exchange and Lloyds Bank. Followers of this column will recall how a lead price *poser in the bank's competition* for sixth-formers has inundated the LME with letters. Now one of the ring-dealing members on the exchange—Associated Lead Manufacturers—is stepping into the breach. It says it will give the answer needed by students —as long as their requests are accompanied by stamped addressed envelopes.

This is a considerable relief both to the LME and the Financial Times commodities department: there seems to have been an amazing increase lately in youthful FT readers studying *lead for a special thesis or a* "forthcoming examination"— all seem coy about admitting that they want to win one of those Californian holidays being offered by Lloyds. To avoid making things too easy for the sixth-*formers, I shall leave them to* find the address of Associated Lead.

Stockholm stick-up

Residents in a south Stockholm suburb have received an official letter saying that their local post office was being closed as the staff went in fear of their lives due to a continual run of armed hold-ups—nine since 1969. In future, residents are to use another completely new post office about a mile away, which has been equipped with the latest aids to deter robbers. Last week the new office had its first taste of reality when two men, one armed with a pistol and the other brandishing an axe, got away with Kr.20,000 (about £2,400).

About 30 sub-post offices in the Stockholm area are being shut as staff are scared to work alone or in small numbers. In the last three years Sweden has spent about Kr.60m. to deter postal bandits, but it appears that this sort of crime does pay. Already the number of such hold-ups in 1978 is well into double figures.

Hope at last

Dr. Alan Bond, director of the artificial intelligence laboratory at Queen Mary College, London University, is going to unveil a new kind of robot on Thursday. He says: "It will be responsive to its environment and will learn from its mistakes."

I trust Bond will be able to *get some ready to stand in the* next general election. Perhaps he could also offer one to Sir Charles Villiers at British Steel.

Observer

FINANCIAL TIMES SURVEY

Monday February 20 1978

Freight and Transport Systems

In all the main sectors world transport is having to cope with a welter of change — a problem not eased by the recession. An increasing degree of regulation seems to be a distinct probability throughout.

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e, regardless of economic climate. Within air transport, such regulation is accepted on the grounds of safety and the need to give carriers some assurance that very large capital investment will not be jeopardised by excess of competition. This is not to say that the forces of regulation may not occasionally be subject to criticism.

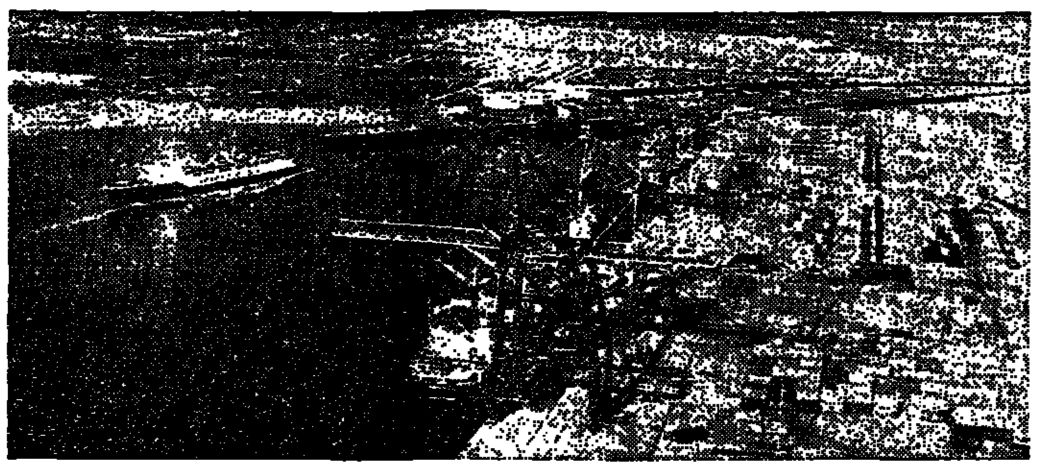
In an area such as road and rail transport, views differ widely. EEC transport policy is founded on a dirigiste approach to such matters and in the U.S. trucking is regulated to a degree unthinkable in this country. The U.K.'s liberal system is, however, under challenge from the hauliers, who are arguing to the Foster Committee on operators' licensing that they too cannot cope with such a free tide of competition and from the Community, whose regulations about drivers' hours the British haulage industry will have to learn to live with during the next three years. At least for the moment, though, the EEC is not pressing the question of bracket or reference tariffs in road haulage, although curiously the demand for minimum tariffs is one which the Foster Committee will hear from some U.K. hauliers.

In shipping, the traditional regulatory medium for the liner trades, the conference, is under attack again in the U.S., where a Grand Jury investigation is expected to begin later this year — a factor which would seemingly contradict the argument about the growth of the regulatory spirit. But at the same time as the U.S. authorities have supported the anti-trust zeal of the Grand Jury, they have toyed, seriously but so far unsuccessfully, with the notion of cargo preference for oil trades. Cargo preference, dormant rather than dead in the minds of the oil-producing States, could yet present a fundamental challenge to the whole concept of the freedom of the seas.

Elsewhere in the shipping industry, European governments are talking of regulatory ways to halt the expansion of the Soviet incursion into liner trades. Then, although it does not come under the strict heading of regulations, the growing Government involvement in the financial support of shipping, as in Norway, or in the connected area of shipbuilding, in almost every nation possessing a shipyard, both mean a louder government voice in the way things will be run. The fact that developing nations have become particularly fond of creating State shipping lines means that the private ship-owning sector is bound to go on declining.

Burden

These developments mean a great burden of responsibility on national governments and on their supra-national equivalents to get their relationships with the freight transport industries right. The penalties of not doing so are obvious enough. Britain's transport users alone spent over £10bn. on goods transport last year and any unwarranted interference with the efficient movement of industrial goods has serious consequences for the consumer. Sir David Orr, the Unilever chairman, said recently that a single day's disruption in Unilever's world-wide transport and distribution operation would cost the company £16m. *in extra stock requirements.*



The French port of Dunkirk-West, with car, train and container terminals linked to U.K. ports like Dover, Harwich and Felixstowe.

As the pace of freight throughput, from merry-go-round coal wagons to self-packaged supermarket goods, has increased, so have the penalties for disruption. The consequences of international regulations for oil tankers, recently proposed by the U.S. to IMCO would have been a 2 per cent. increase in the price of oil.

Although principled debate on the subject of freedom of competition is at the heart of almost every EEC proposal on transport matters, the parallel requirement for fairness creates endless problems. In theory, the system of a quota of road haulage permits, administered almost entirely on a national rather than a community basis, is a nonsense, but it is a nonsense with no end in sight because the penalties of giving the heavy lorry freedom of the European motorways is more than a number of nations dare contemplate. West Germany, with its £2.4bn. a year support for its railway and, like others, its influential anti-juggernaut anti-new roads environmental lobby, is a case in point. For the foreseeable future, the argument is going to be about not whether there should be a quota system, but simply how it can be operated most fairly.

The other big European road haulage *issues—lorry drivers'* hours and maximum vehicle weights—present bigger challenges still. The first has been more or less resolved, with Britain accepting a three-year phase-in of the eight-hour day from last month, but the associated issue of compulsory tachographs continues to divide Britain and Ireland from the rest of the Community. At least in the opinion of many in the British industry, this is a case of the Community enforcing uniformity on a purely domestic matter which has no bearing on fairness of competition for intra-Community movements.

A solution on vehicle weights *seems some distance away, with* permitted gross weights varying now from 32 tons to 44 tons. Meanwhile the truck producers are becoming increasingly transnational and the freight carriers more committed to inter-modal unit road traffic. Both would benefit considerably from harmonisation of weights.

Railways

When it comes to railways, the Community has made virtually no progress, which is a pity if only for the lack of consideration it implies for the degree to which railway financial problems dominate the minds of several member governments. Britain's Transport White Paper last June was the first for some time not to have been sparked off by a cash crisis at British Rail. More positively, the quagmire of road haulage permits and the tighter limitations on the driving day suggest a wider role for rail in the immediate future and in the longer term, energy pressures may offer an even greater opportunity. The lack of constructive European debate on the subject is disturbing.

Of course it is possible to take all this cloak of regulation too seriously. Transport operators, freight forwarders and their customers are able to circumvent many requirements of even the most determined bureaucracies. An example of an official exercise which proved to be largely pointless was the "little Neddy" report on through transport to the EEC last year.

This document, although accurate enough in many of its observations about the trend towards through transport and the need for industry to grasp this trend, had almost nothing to say by way of conclusion. Its suggestion that carriers should make sure they offer clear, door to door delivery terms, partly in the interests of balance of payments gains, was interesting, but is not likely to be much needed by operators.

In shipping, the EEC is only just beginning to consider the idea of some sort of all-em*bracing marine philosophy, but* it will probably not get through 1978 without divisions over the UNCTAD liner code coming to the fore. This is mainly an issue of straight self-interest between community members wanting more cross-trade and the larger cross-traders like Britain not wanting to sacrifice what they have, but it is one where the Community would do well to be able to present a united face to the developing world.

Shipowners themselves look most urgently to the Community in 1978 for some action to stem the flow of grants and cheap credit from member Governments to their *shipbuilders*—a flow which in the view of the shipping industry is having a disastrous effect in delaying the re-balancing of supply and demand in shipping markets.

The U.K. Government's response to some of those developments, as summed up in last June's Transport White Paper, has been to declare a regime of no subsidisation for freight carriers, steps to ensure less environmentally hazardous lorries and so far as possible fair terms of competition between road and rail. In philosophy, the policy has much to recommend it—not least because its rejection of traditional Labour Party arguments opens up the prospect of avoiding wild swings of policy between administrations *of different parties.* When the Opposition's transport policy document is agitating strongly about a matter of such narrow concern as the information in British Rail's accounts, we can be sure there is not too much difference of basic policy.

The general prospects for the freight transport industries in 1978 remain unavoidably tied *to the rate of economic growth* and the increase in world trade. There are few grounds for optimism in most sectors, but at least now the pace of innovation in ports technology, new ship designs and road-based unit load systems has slackened, giving everyone an opportunity to take stock and adjust to the consequences of a decade of rapid change. Only as the pace of world trade quickens will it be possible to judge the extent to which the growth in the spirit of regulation and trade protection has become a permanent feature of the freight transport industries.

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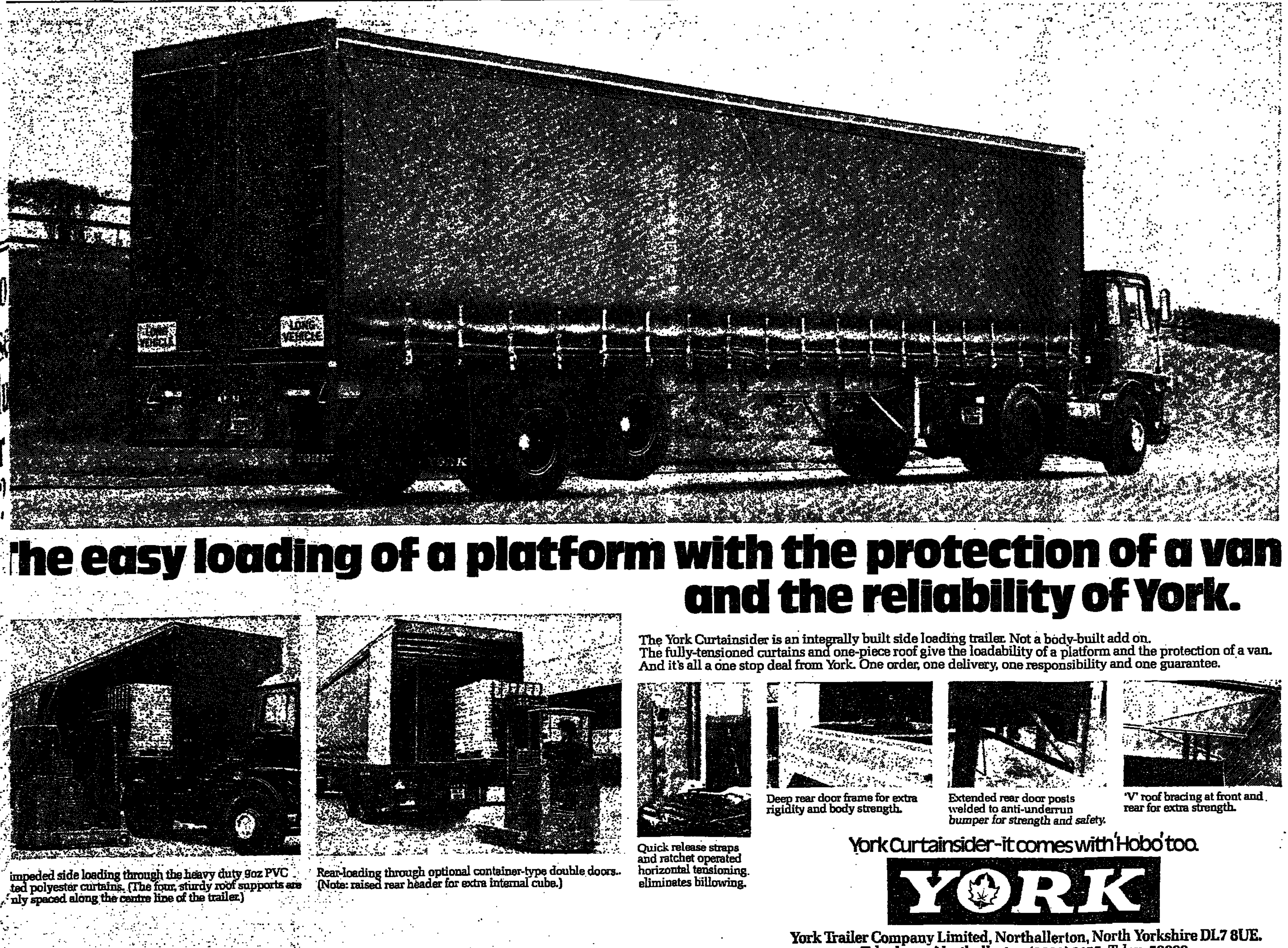

Vogue for package deals

FREIGHT TRANSPORT had been *one of the fastest growing* activities in recent decades both in Britain and in the world generally. The rate of increase has slackened or disappeared altogether during the post-1973 world economic recession, but in the 1950s and 1960s, according to some estimates compiled by the Transport and Road Research Laboratory, the total world demand for freight transport—as measured by the somewhat unsatisfactory yardstick of ton-miles of work done —was probably growing by almost 8 per cent. a year. This was faster than the increase in both world population and world income during the same period—and faster too than the growth in passenger transport as measured by the total volume of passenger-miles.

This rate of increase was not all that surprising. The 1950s and 1960s witnessed the longest sustained wave of economic expansion the world has so far seen, *and the most notable feature* of that expansion was the vast growth in trade between countries, and especially between the industrialised countries. Whereas internal freight movements tend to grow in volume in rough correspondence to the growth of a national economy—subject to the *evolving changes in the location and* techniques of manufacture—the volume of international freight movement will be affected by the volume of international trade and the distance between trading partners.

As one might expect, this expansion has been accompanied by marked technological and operational changes in freight transport systems. The shipping industry has invested in large bulk carriers to move oil and an increasing range of *dry cargoes. It has converted* most of the world's major deep sea and short sea routes to container and other unitised cargo handling methods. The ports have invested heavily in new and more efficient berth and cargo handling capacity to match the *changing techniques* and volume of maritime freight movement. In the air, the development of air freight has created an entirely new competitive mode large enough to justify the design and operation of large specialised jet air carriers.

On the railways, freight handling systems have been transformed by the adoption of container and other full-train load systems and by improvements in signalling, communications, and motive power. On the roads, unit costs have been reduced by heavy investment in new road systems and by the design of larger, more efficient trucks with bigger pay-loads. Pipelines —a relatively new and specialised freight carrier — have arrived on the scene. And in *the organisation and control of* freight movement, automatic data processing techniques have facilitated the development of more sophisticated, more economical and more responsive systems for regulating the flow of supplies to factories and out again to customers and shops.

Specialised

As a result of all these developments, freight transport services have become increasingly specialised and the different modes have increasingly become complementary. That does not mean competition has become less intensive. Far from it, both within and between modes. But the services on offer have become not so much transport services as distribution services using, more often than not, more than one mode or type of service. In short, *inter-modal operations* are becoming increasingly predominant. Just as road carriers in this country are offering highly specialised services for, *to take some examples, moving* fashion clothing or refrigerated foods or complete distribution services including storage, warehousing, and stock control, so freight forwarders and other transport interests are providing inter-modal door-to-door services for exports.

P. & O. and Ocean Transport and Trading, Britain's two largest shipping groups, have for example diversified into a wide range of other transport activities, including international freight forwarding, road haulage, air freight, and land distribution services. Many U.K. road hauliers, both large and small, have moved into cross-Channel operations, acquiring a substantial share of that market.

Some have gone further afield, opening up overland routes to Eastern Europe or to the Middle East in response to the demand created by port congestion in that region. Both hauliers and other companies are participating in joint ventures in the Middle East so as *to be able to provide onward distribution* services. Several U.K. firms are also offering specialised road carrier services in different parts of Africa.

The railways, both here and on the Continent, have meanwhile been vastly improving their cross-Channel container and full-train load services. In journey times and cost these services have become much more competitive in recent years, for shipments of a size, loadability, distance and route suitable for rail hauls. *In some sections of* the market, too, the cost and delivery times offered by road-air-road services have also become highly competitive.

For British freight carriers and forwarders Western Europe provides the biggest single market. It is now the source or destination *of just over half of* Britain's total visible trade, as against barely a quarter two decades ago. It is one which, because of the application of *roll-on*, roll-off techniques to surmount the sea barrier and because of the relatively short distances involved, lent itself most readily to exploitation by road based freight systems. In the last ten years the total ro-ro tonnage crossing to the Continent has grown from barely half-a-million tonnes a year to more than 13m. tonnes.

This does not mean it has been an easy market to break into or to make a profit out of. Several haulage companies, including some of the biggest in the land, have burnt their fingers. And there has also been the perennial problem of acquiring licences to operate—both under the EEC Community quota and the system of bilateral inter-governmental permits. There has never been a year when the quota or the number of permits negotiated by the Government for U.K. carriers has been sufficient to match the demand—which does not make it surprising that there should be a fringe of black market operations using forged permits or none at all, especially on the Middle East run.

To meet the permit problem some carriers have gone into partnership arrangements with a Continental firm. Some have used "kangaroo" rail services —putting the loaded trailer on a train for part of the way. But, while this may be useful on the longer routes, including those to the Balkans or further, the height, roof design, and loadability of the trailer and the question of an accompanying driver need careful consideration.

Pressure from the European Community and from national governments such as the British and Dutch for a more liberal attitude to cross-frontier operations by road has been continuous. But for a variety of historical, economic, social and political reasons the French and German road haulage industries have always been tightly regulated. Neither the French and German railways nor, for that matter, many of the French and German hauliers within the privileged ring are keen on a more open system. Because of taxes and insurance costs (and the exchange rate) West German hauliers are virtually priced out of the cross-frontier haulage market: and, compared with the Dutch, British (and to a growing extent in recent years, the Swiss), French hauliers are not a particularly strong competitive force in this market.

The pressure of demand as intra-Community trade has grown has been gradually prising open more cross-frontier opportunities for road carriers just as earlier it led to improved procedures for cross-frontier *rail freight movement. Progress* may be slow, but it is exporters and importers that want efficient, speedy, and reliable door-to-door delivery services and they will use the forwarders and carriers that irrespective of mode, offer the most competitive service providing these requirements.

Colin Jones

Materials handling equipment

MANUFACTURERS TO-DAY aim to produce the most economic quantities and to transport products to distributors and customers in large and efficient loads. The general trend is for more loads to be unitised *or palletised, which in turn gives more opportunity for efficient* handling at both ends of the journey and on the way.

But there is still. plenty of room for improvement. A Department of Industry survey of 30 engineering companies provided enough evidence for the Institute of Materials Handling (IMH) to suggest that U.K. industry was spending £1bn. more than it needs to on storage and materials handling.

Much of the needless expenditure could be cut by the introduction of better handling methods rather than the purchase of new mechanical handling equipment, according to the survey.

But that concentrated only on waste. If manufacturing industry is to improve its efficiency, there will have to be investment in reliable handling equipment, investment in data handling systems and investment in training.

The mechanical handling products are already available to do most of the jobs. "In *specialised areas it will be justifiable* to try out the new and grand concepts which appear from time to time from basic or applied research. But for a long time to come our goods will be *mainly* handled and carried by refinements of the equipment and principles which, in one form or another, are familiar to us now," said Mr. Geoffrey Butcher, a director of Modern Materials Management, in a paper presented to the IMH recently.

Compare

To develop his point further, you have only to compare the number of lorry-mounted cranes in the U.K. with those seen on vehicles in Continental Europe to understand just how far Britain has to go before getting the full benefits of this mechanical handling device.

The concept that a lorry should have its own small crane to allow the driver to load and unload without other human aid has been around for many years yet has not made too much of an impact in Britain, possibly because of union resistance to changes in existing working *methods and manning levels.* At the moment the Swedish Hyab lorry-mounted crane has the major market share and it is distributed in the U.K. by the 600 Group.

In some *handling* areas the debate continues about which equipment is best for a particular purpose. For example, there are two schools of thought about how containers should be shunted about on the dockside. Should it be by straddle carrier, which is mounted on four tall legs, moves over the container and clasps it up to its belly, or by the big sideloading liftrucks designed for container handling?

Britain is represented in both these product areas. Ferranti Enginering, a recently-formed subsidiary of the Ferranti group, is making straddle carriers, while Lancer Boss has gained a worldwide reputation for its sideleaders. These machines helped the container revolution on its way at the docks.

In the warehouse the materials handling industry is waiting *with some* awe to see how the £7.5m. warehouse at Leeds developed for Elida Gibbs, Unilever's toiletries subsidiary works out. Probably the most highly automated plant of its kind in Britain, on the goods inward side there will be a fully-automated Teletrac train system to convey pallets, with transfer to driver-controlled loading trucks to put the goods into the correct pallet bay for order picking.

On the ordering side there will be two huge *Ordermatic* SI order-picking machines by SI Handling Systems, each able to control up to 1,500 goods slides from as many product racks in the system.

At last year's Movement 77 materials handling equipment exhibition, SI Handling launched another idea—called Itematic— for automatic order selection of single items. This is ideal for any distribution centre handling small packs—toiletries, pharmaceuticals, films, tobacco products and so on. The claim is that it is an economical and practical way of having automatic order selection of items of both regular and irregular shapes in less-than-full case quantities.

Another product which caused some favourable comment in the materials handling industry and which was introduced at the show was the Hi-Racker developed by Barlow Handling for pallet picking full loads and order picking individual items to and from the pallet. The Hi-Racker embodies the principle of elevating the cab of the vehicle, with the operator. He can store and retrieve complete loads *up to* 3,080 lb *at* lift heights of up to 40 feet in aisle widths of 57 inches, depending on pallet dimensions. The "walk through" cab allows the operator to stand *close to the racking and pallet* to select individual items.

A method of safely lifting a man into the air on the forks of a lift truck was one of the "top ten" items of equipment nominated by *Materials Handling News* last month. The magazine monitors readers' inquiries it receives about new products and one of those which claimed attention in 1977 was an attachment from E. V. Leonard which is secured to the forks and used as a maintenance platform. The manufacturer stresses it is not an order picker so that the truck should not be moved while the platform is raised. It also says the safe maximum working height is 16 feet.

Another idea which appealed to MHN readers was the Modular Distribution Systems' Transfer Frame. These are lift frames with built-in hydraulics which can be used to provide mobile, height-adjustable loading docks, work and elevating platforms and mobile gantry cranage for large and awkward *loads*, as well as for converting containers into a form of mobile warehousing and discharging bulk materials from containers.

Capacity

Lift capacity is up to 40 tonnes, operation can be carried out on rough or smooth surfaces, level or sloping. Displaced loads can be coped with and the manufacturers say bumps by vehicles have been shown not to dislodge the frames which can travel with a container.

One of the few genuinely new machines launched at Movement 77 also made the MHN list. It is a universal narrow-aisle truck from Narrow Aisle (U.K.) *which aims to combine the* virtues of the reach truck and the *narrow-aisle* stacker. The truck can be used as a reach truck in the normal way, but when used for narrow-aisle stacking scores over the normal stacker by having a much *reduced length — the necessary* transfer gangway at 9 feet is only 60 per cent. of that of most narrow-aisle stackers.

Capacity is 1,000 kg. and the lift height is 6m. which the makers reckon is enough for most British warehouses. The price is 10 per cent. to 20 per cent. more than a reach truck compared with a *conventional narrow-aisle stacker* which can be up to 80 per cent. more.

Sad to say, customers tend to regard technological developments in the mechanical handling sector conservatively—they prefer to see equipment working in someone else's warehouse or plant before they order it for themselves. But obviously, as the MHN experience shows, it is still possible to succeed with something completely now.

Sad to say, customers tend to regard technological developments in the mechanical handling sector conservatively—they prefer to see equipment working in someone else's warehouse or plant before they order it for themselves. But obviously, as the MHN experience shows, it is still possible to succeed with something completely new.

Kenneth Gooding

Movement by pipeline

WITH THE first oil due to arrive at the Sullom Voe terminal in the Shetland Islands in the early summer, the first stage of one of the biggest pipeline networks in the North Sea will gradually be brought into service later this year. Two pipelines now run from the groups of fields around Brent and Ninian reaching separate landfalls on the mainland of Shetland. They serve as a major reminder of the importance and advantages of pipelines for the transmission of liquids and gases.

Oil flowing through these pipelines *will* eventually turn the Sullom Voe terminal into the biggest of its kind in Europe. The first oil through the terminal will come from the Ninian Field's southern platform, some 100 miles to the north-east of Shetland and this will then be followed by production from the Heather Field and in the autumn the first supplies from the Brent Field, the largest discovery in U.K. waters, will arrive.

By the time the U.K. reaches self-sufficiency *in oil* in 1979-80 *most of its supplies will* be flowing ashore through hundreds of miles of pipelines through the Brent, Ninian, Forties and Piper systems. Added to this almost the entire supply of natural gas to the U.K. is brought ashore by pipeline, either from the clutch of fields in the southern sector of the North Sea developed in the 1960s, or as will increasingly be the case, from the large northern fields Frigg and Brent.

Considerable though these achievements might be, however, they pale when put against the ambitious £5bn. pipeline scheme to collect North Sea gas from many pockets around the North Sea, which is currently being studied by a company set up by the Government. Gas Gathering Pipelines (North Sea) is a consultative company with both private and State-owned interests. Its final report on the options open to the Government is expected in the spring, but the preliminary report presented two months ago recommended that a start should be made on the first stage of a pipeline network costing an estimated £250m.

More time might well be needed to study the merits of a much bigger collection system, but it seems almost certain that the Government will sanction the construction of an initial system based on the Frigg gas line, already in operation, and the Brent gas line that is now under construction.

This initial programme would involve the building of spur-lines to link northern fields like Thistle, Ninian and Murchison to the Brent system, and Piper and Tartan among others to the Frigg line. This limited first stage appears to be necessary if oil companies are to avoid flaring and wasting natural gas. Much of the gas will be produced along with the oil. A number of the fields that could be brought into the initial first phase of the programme are due to come on stream in the next couple of years so the limited gas gathering network would have to be built quickly if the Government is to avoid further flaring.

This part of the project might be approved in the first half of this year so that it could be in operation by 1980. Even the mini-network will represent an important business opportunity for the pipeline industry, but major questions are still to be answered. It is, for instance, unclear as to who would pay for the network and who would be the operator.

But this scheme is almost insignificant beside the larger £5bn. complex. The cost has *escalated dramatically* since the first evaluation was carried out by Williams Merz nearly two years ago. Their report suggested that a fairly comprehensive gathering system capable of handling between 1bn. and 1.5bn. cubic feet a day of gas *and 6m. to 9m. tonnes* a year of heavy gases could be constructed for £1.6bn. to £2bn. Several of the participants in the latest study are far from convinced that such an ambitious, costly project is worthwhile, but it is known that there is considerable political sympathy for the project and it is plain that the Government does not want to see the gas wasted and flared.

Quadrant

So the scheme that is now being evaluated could include the construction of a new trunk line running from St. Fergus to a point north of the Forties Field. From here one line could run northwards possibly collecting gas from fields in quadrant 16 such as Maureen, Brae and Thelma and others close to the U.K./Norwegian median line.

Another line could go south towards the Lomond Field. One of the major problems, however, is that the reservoir characteristics of the fields that would be tapped by such a network are all different, and so at this stage it is difficult to foresee what type of pipeline might be built in the late 1980s or early 1990s.

Pipelines might at first sight appear to be the most promising way of collecting the gas from the many different fields, but the Government is also studying alternatives. David Brown Vosper Offshore has been commissioned to study the possibility of liquefying natural gas offshore, and Preece Cardew and Rider is examing the use of gas for offshore power generation. As Dr. Dickson Mabon, the Minister of State for Energy, has pointed out, "the total quantity of associated gas is very large, the fact that it occurs in many small accumulations poses considerable problems when trying to devise an economic pipeline system. We have therefore been investigating other possible methods of transporting the gas ashore."

One important factor in whether the main gathering scheme goes ahead is the attitude of the Norwegian Government, for the economics of the network could be enhanced if gas from the median-line Statfjord Field and other finds in the Norwegian sector could also be carried to St. Fergus. Thus as part of the £5bn. scheme a new gas trunk line has been included that would run through Britain with a cross-Channel link to France and Belgium. This would give the Norwegians access to the energy-hungry continental market

The existence of North Sea oil and gas is of major importance for the pipeline industry, and just on the basis of existing programmes the network should reach 2,000 miles by 1980. Unfortunately from the U.K. balance of payments point of view only a small percentage of the main offshore pipework has been manufactured in Britain. However, British Steel's final entry into the market for heavy pipes, presumably influenced by the possible gas gathering network, should ensure that a bigger percentage of future work remains in the U.K.

Onshore the U.K. is slowly moving towards the point where it will eventually have a pipe-

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Bemusing choice for users

E MOVEMENT, storage, and idling of freight is a large siness and a major element industrial costs. Reliable ires are hard to come by. : the best estimates suggest t it probably represents ut 8-10 per cent. of the total : of manufacture and distri- ion. It is an area of activity ere cost pressures have been less strong than in other as in recent years. The cost fuel, vehicles, drivers, and re parts has been rising rply, and so have the over- ds and cost in management e of running one's own in- se transport fleet.

is an area where manufac- rs and distributors are pre- ed with a bemusing choice different services by an easingly specialised and egated range of outside con- tors. And it is an activity ch, in many businesses, does often command a high and inuing priority in the allo- n of senior managerial time attention.

many firms, distribution is ocess which looks after the of moving supplies into the ry and moving finished s out to the customer or which ordered them. It area with its own peculiar olexity of problems which it is is best delegated to ex- s taken on for the purpose. n the pressures for cost gs is on, distribution will xpected to make its contribution: after all, the money it absorbs is substantial enough. When a new factory or plant is being considered, transport and distribution facilities may be a factor that is taken into account, especially if the supplies required or the products to be made are likely to pose a problem—as, to give an extreme example, at a steel works or power station.

Consideration may even be given to the question of whether it is worth going on running one's own distribution fleet rather than contracting more of the business out, particularly in these days of increasingly onerous penalties for faulty maintenance or operation of lorry fleets. But, generally, there is still a widespread tendency to regard transport and distribution as a compartment unto itself.

Integral

It is, however, much more than that. It is much more than a support service for the marketing effort—a service that aims to operate at maximum reliability for the lowest possible cost. Physical distribution management—to adopt the awkward and off-putting terminology which is increasingly being used—is an integral part of any business. It is a process that needs to be looked at as a whole embracing the entire flow from raw materials to the final point of distribution including handling, storage, inventory management, data processing, packaging, merchandising, and customer service

It is a process that needs to be given as much close consideration as marketing and distribution, which needs to be related to them and them to it, and in which the full range of options needs to be considered afresh, for the full value of this adjunct of a business to be realised. None of these activities can be considered in isolation. They are all part of the balanced mix in a company's business strategy.

This approach to the role of physical distribution management may not be universally evident, but is also far from new. There are countless examples of companies which have achieved savings in cost or improvements in customer service—or both—by taking PDM seriously. In many instances, they were prompted by the dramatic changes that have taken place in the marketing and retail distribution of manufactured food and other branded consumer products.

The success of these products depends upon mass advertising and attractive packaging to build new markets and repeat purchases, upon high volume sales and close stock control to ensure low unit costs, and upon a rapid and flexible responsiveness to consumer needs. These developments have in turn been associated with a large-scale reshaping of the structure of wholesale and retail distribution —the decline of the small, over-the-counter shop and the arrival of the self-service store, the supermarket, the multiple, discount house, cash-and-carry, hypermarket, and out-of-town shopping centre.

Prompted

In other instances, a new appreciation of the role of physical distribution management may have been prompted by changes in the nature of services offered by outside carriers. A growing number of hauliers have been developing more and more specialised services to meet the requirements of particular customers or particular sectors of industry. Many are also providing a full range of distribution services including not only delivery but also warehousing, stock control, invoicing, account collection, sales analyses, cost breakdowns, and assessments of the effects of changes in packaging, frequencies of delivery, lead times, special promotions, and so forth.

Examples are always invidious—there are so many that could be given. But perhaps one might be cited as illustrative both of a consumer-goods group and a specialised transport group. It is of course Unilever—a world-wide group in which a single day's delay throughout the group's operation would require an extra £16m. worth of stock. Most of Unilever's transport interests were set up or acquired to provide the group with a standard of service they could not obtain elsewhere. They soon moved on from storage and delivery to the provision of a whole range of services, and this in turn led to the provision of similar services for outside customers. SPD, one of the Unilever companies in this country, now provides a high-street distribution service for 35 outside firms as well as 19 Unilever companies, and the number of outside contracts is growing all the time.

Companies of Unilever's size have a relative wealth of managerial talent to be able to focus on such matters. Companies considerably smaller in size are often not so well-placed. The distribution manager is too busy running his parish and his colleagues in the hierarchy too pressed with their own problems. Even if the need for a fresh appraisal is felt, there is not the time—or it is hard to judge the relative merits of different outside carriers offering different levels or ranges of service.

This is where the distribution consultant can come into his own. There are not many in this country. But the Freight Transport Association, the representative body for industrial users of freight transport services, is now running a consultancy service in conjunction with three firms of consultants. The consultant may take anything up to a year to complete his investigation. But at the end of that time the consultant will have acquired a comprehensive grasp of his client's operations and its management and monitoring systems. He will present the options and evaluate them. He will be ready to assist in the establishment of a new system and the recruitment of a managerial team to run it. And his fee will be paid for many times over by the savings produced by the changes stimulated by his recommendations.

The first step however is for distribution—or rather physical distribution management—to be regarded as a sufficiently important matter to be considered seriously right at the top of the company's managerial hierarchy.

C.J.

Pipeline

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line network for the most important petrochemical building block, ethylene. Such grids already exist in continental Europe.

In the U.K. there is already an ethylene pipeline crossing the Pennines from ICI's petrochemicals site at Wilton on Teesside, to its plants on Merseyside and also connecting with Shell installations at Carrington. Now a second pipeline is almost complete between Wilton and BP's petrochemical site at Grangemouth on the Firth of Forth. The 155-mile pipeline from Teesside to the Forth is part of a £150m. scheme which includes the building of a 500,000 tonnes a year ethylene plant. This complex should come on stream towards the end of the year.

The pipeline will give the chemical companies involved a welcome new flexibility in moving around the country large tonnages of ethylene and in balancing the needs of different sites. If the planned cracker for Mossmorran goes ahead in Fife, it would not be surprising if this were to be joined by a short pipeline across the Forth to the BP site, thus connecting both Shell and Esso to the northern end of the line.

The proposed Mossmorran plant is to be joined to its feedstock source via a 135-mile pipeline to St. Fergus, near Peterhead, which is due to carry natural gas liquids, ethane, butane and propane from the North Sea Brent Field. However, this line is currently running into a lot of local opposition from planning authorities and residents.

But it is not only liquids and gases that will be carried by pipelines in the future. Industries which depend on the constant supply of raw materials such as coal, ores or limestone are showing increasing interest in the use of pipelines for the rapid movement of solids. First applications are expected to be in the transport of bulk solids, such as coal, industrial wastes or gravel, and feasibility studies have been conducted for uses such as the removal of colliery spoil. It has been shown that when road or rail facilities are lacking it is cheaper to install pipelines, especially in difficult country.

The obvious growth area for pipelines in the U.K. may be for crude oil and gas developments in the North Sea, but in 1976 pipelines already took a share of more than 18 per cent. in the transport of refined petroleum products in the U.K. And with systems for the movement of solids such as iron ore, mixed in a slurry with iron sand and water, already in use in Peru and New Zealand, pipelines are set for an era of major development.

Kevin Done

Major role for forwarders

TRADITIONAL rallying f successive Chancellors of Exchequer has been to t British industry to t more. Yet it takes a lot than words to convert this for action into actual ts. One of the most im- nt factors — if not the al one — is the ability of anies to get their products eir destination. In this ise the freight forwarder a leading role.

international freight rder must be responsible providing the range of e and service to companies g in world markets to them mainly with their bution problems but also other aspects of their ational trading.

capacity to develop t markets depends in- ngly on the ability to ise and to respond im- tely to short-term market tunities. The maximising fit in a market may in no way be influenced by the f distribution.

re are seven main func- which the efficient freight rder has to carry out. are:—

planning and costing of by land, sea, or air, to e the correct blend of ility, speed, and economy.

pre-booking and co- tion of transport and t space.

preparation of docu- tion relating to shipping Customs clearance.

presentation of goods toms where required.

provision of ancillary es when required, such as g, warehousing, marine nce, charter, etc.

provision of advice to ters and exporters con- g distribution links to rom world markets, and provision of quotations ing to buying or selling

ice concerning any s in procedures.

freight forwarding indus- dominated by privately- companies, which in- however, some of the in the industry.

er

ording to a recent survey freight forwarders by Dataquest, "the implica- are that airfreight com- are smaller, less ous, and also less profit- average than the surface rid companies." But it he rider that the sample small to place any cal significance on the

may also be the case that ivately owned companies t primarily concerned to ise profits, and for this the profit margins are his would not explain, er, why as many as 49 of 25 companies reviewed staining losses according r latest years' accounts," rvey adds.

of the few quoted com- directly involved in forwarding is the Lep which has over 30 offices hout the U.K. and a net- of associated companies gents throughout the It also has a number of companies which look uch ancillary services as insurance, chartering, and packing.

Of the private companies reviewed by the Jordans survey, it selects Mann and Son (London) "as being the outstanding performer" even though its activities were not confined to freight forwarding. "Not only did this company achieve a sharp improvement in profits in 1975-76, but its sales improved steadily and its bank borrowings were sharply reduced during the year," comments Jordans.

The industry itself is at a crucial period in its development as it responds to new technological developments and the pressures caused by rising costs and competition.

Replace

For example, the Customs and Excise is planning to replace the LACES air cargo data processing system with the updated ACP 80, as well as their own in-house computer system.

The industry is well served by the Institute of Freight Forwarders which is helping its 2,700 individual and 620 corporate members to maintain control over the pattern of developments which are pointing the industry in a new direction.

A detailed study of the overall forwarding requirements for the next decade had identified the real training needs of the future. Consequently the Government's Training Services Agency has just set up the international freight forwarding industrial training council under the leadership of the Institute.

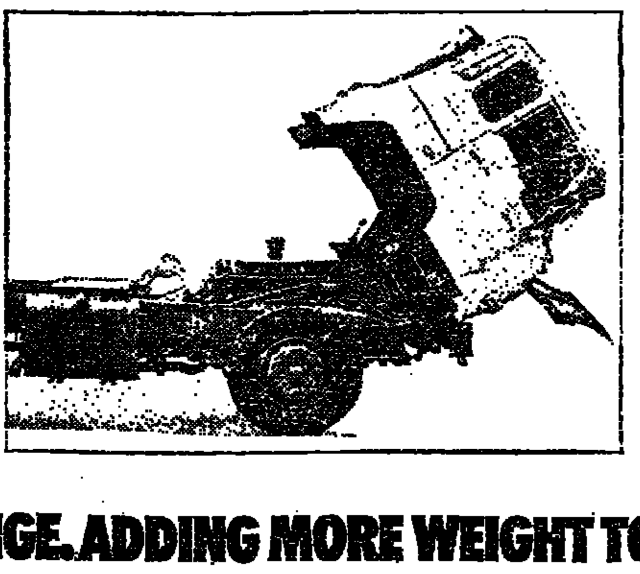
The setting up of a training council, however, does not mean that the Institute will cease to have its own education and training committee which provides its present training needs. This will continue but will work closely with the new council. The Institute is also reviewing its membership pattern and the professional requirements for membership as part of the overall package of training and other changes which are being introduced.

The Institute is also keen to see much tighter controls exercised over people who operate forwarding services without any proper qualification or backing. But it acknowledges that the final arbiter of standards in the industry is the user.

But if companies using freight forwarding services base their decisions on price rather than service, and professional expertise, then standards will suffer. The Institute points out that far too many organisations judge their own shipping department's performance on the actual cost of freight charges to send their goods overseas. But this is only one narrow element of decision-making in the overall distribution process.

The question remains whether the U.K. freight forwarding industry may be subjected to Government intervention in the form of a licensing system, as operates in the U.S. The Government is understood at present to be reluctant to bring in legislation on this issue. But the EEC is also looking at the problem of regularising the activities of freight forwarders between member States.

David Churchill



Road hauliers in low spirits

AMID THE general sighs of relief among Ministers and industrialists that the ten per cent. pay guideline looks increasingly as if it will stick, Britain's road hauliers are feeling in low spirits.

One section of the industry, predominantly that in the Midlands, has run into Government blacklist problems because it could find no concerted way of resisting the pressure for a 15 per cent. settlement from a section of the transport workers noted for its toughness. Another section, which still has not settled is wondering at the financial consequences of its labour costs increasing out of line with other industries at a time when margins are too fine for comfort anyway, while yet another section has dug its heels in over the 10 per cent. and provoked strike action.

All this has happened at a time when the industry is in a state of some disarray. It has lost its wages council, without finding any central bargaining alternative; it has lost its fight against EEC drivers' hours and faces the consequential erosion of productivity; it has lost its argument with Government that lorries are overtaxed and it has lost the last vestiges of any ability for central guidance on tariffs. *Moreover, as a sequel to* several of these events, although mainly to do with inability or unwillingness to obey the 10 per cent. limit, the industry is being investigated by the Price Commission.

If these developments were not enough, road haulage is, like the economy in general, still in the trough of recession and punch-drunk with the pace of inflation in its capital equipment. The heavy lorry and its spare parts have increased in price by between 150 and 200 per cent. in six years.

It is not surprising that in this climate remedies which appear desperate to outsiders are being sought. The recently appointed Foster committee of inquiry into operators' licensing will hear many demands for a return to something like the pre-1968 licensing regime, when public hauliers were protected against competition from own account fleets; pleas for minimum tariffs in the industry and for control over the flow of entrants into a profession which remains one of the most inviting for the entrepreneur with limited financial backing and limited skills.

It will be for Professor Foster and his team to assess the desirability of the various restrictive practices under debate against the alternative, forthrightly argued by the *transport users' group, the* Freight Transport Association, for the continuance of the present system in the interests of keeping transport costs to a minimum within the bounds of safe and efficient operation.

Forged

In looking at the details of operators' licensing, the committee will also no doubt be *bearing in mind the economic* pressures under which the hauliers' case has been forged in the last three years. Precise figures are not available on this subject, but last year's Jordan Datquest survey on haulage companies (few of which are publicly quoted) showed an average return on capital employed of around 11 per cent.

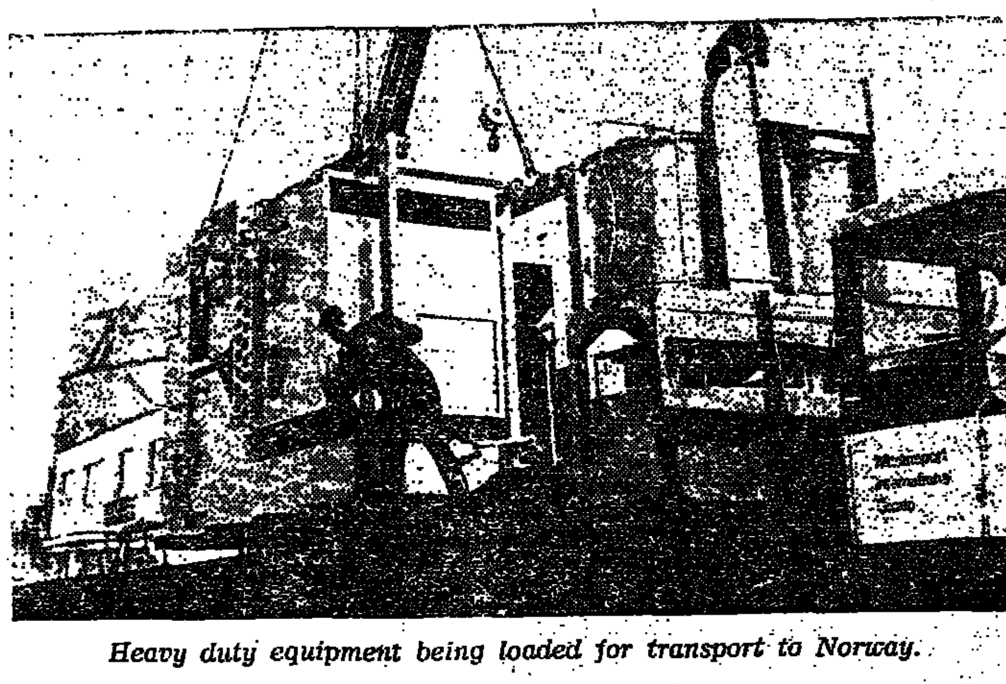
Views vary on what constitutes an adequate return. The chief executive of the National Freight Corporation has suggested that allowing for a dividend payment of 10 per cent., the target should be 33 per cent. Mr. James Duncan, chairman of one of Britain's most successful *hauliers, the Transport* Development Group, did not mention a specific target in a recent review of the subject, but he did join ranks with those who are loudly urging the industry to adopt replacement cost accounting TDG's return on assets, including that in its important non-haulage business, was 15 per cent. in 1976. Another large haulier says it now requires a 20 per cent. return compared with 14 per cent. three years ago.

No one really knows to what extent these warnings, which have been the subject of a thorough Road Haulage Association campaign in the last 12 months, have been heeded, especially by the owners of the almost 40 per cent. of vehicles which are in fleets totalling fewer than six lorries. The Freight Transport Association's monitor of haulage rates suggests that last year hauliers priced a couple of points *ahead of inflation and* certainly loss-making companies within the NFC have been pricing aggressively. But the industry's leaders say that their own information puts beyond doubt the claim that hauliers' charges are far from keeping pace with inflation.

This raises the question of how hauliers are actually surviving. Although road haulage's record of 400 bankruptcies was one of the worst in 1976, it is hardly a large proportion of the almost 40,000 operators.

Probably the answer is that corners have been cut on maintenance and, among the small operators, *overheads will* have been reduced and payrolls cut. Total employment by road haulage has been falling steadily by about 3 per cent. a year since 1973 to a figure below 200,000. The truck sales figures between *1973* and *1976* bear witness to the fact that purchases of new vehicles has been put back—a process which can *only* go so far without disastrous consequences in terms of efficiency and ultimately finance. In the last year, a pick-up *in the market* suggests this point has been reached for many operators. Given recent rates of inflation, it is probably sound practice to keep the age profile of a fleet to a minimum. P and O Road services, for example, runs at an average of three years only.

So far there has been less hard evidence that the industry has slid into financial ruin than there has been clamour that it is about to do so through what Mr. Duncan describes as "a monumental cash flow problem." What some in the industry fear is that the present unrest on pay—and even those employers who have settled will not rest easy that they can count on holding that settlement for a year if the guidelines are substantially overturned elsewhere—will push some hauliers over the edge.



Heavy duty equipment being loaded for transport to Norway.

Added to these most pressing difficulties of the economic scene and price/pay code problems, the industry does not feel it is getting much support from the legislators. Mr. John Silbermann, a national vice-president of the Road Haulage Association, said not long ago that the three factors together constituted "the most serious peace-time threat to Britain's road haulage industry."

The most costly piece of legislation in the air is the change to the EEC eight-hour driving day, a transition to be spread over three years, but which has already placed serious *restrictions on long-distance trunking for non-rigid* vehicles.

In addition, the industry will not be surprised to find a further increase in vehicle excise duty for the heaviest lorries in April's Budget, although it entirely rejects the road track calculations on the basis of which it would be justified.

Within the Transport Bill now before Parliament, there is not much for hauliers to worry about, although the increase in powers for the authorities to divert lorries suspected of over-loading to weighbridges will only be the first shot in the Government's campaign to, as last year's White Paper put it, "civilise the heavy lorry." Many hauliers do not object to this theme of higher environmental standards for lorries, but they feel that the Government is *not offering much in return.* What they would like most as compensation is some sign of movement towards higher *maximum vehicle weights and,* less urgently, a re-think of the cuts in the road building budget.

Ian Hargreaves

Highways programme to run piecemeal

IT IS a curious coincidence that the middle decades of this and the two previous centuries should all have witnessed a *transport revolution.* Two hundred years ago the age of canal building was in full swing. Last century was the age of railway building. This century the major change has been in roads and road transport—or, to be more precise perhaps, in the availabilty of private transport for the individual business or household. None of these revolutions lasted for very long. There was a great flurry of new construction—on the Continent as well as in Britain—which after a few decades peaked out and gradually waned. Each of these revolutions in turn generated social pressures and criticism which to one degree or *other played a part in setting* limits to the extent and rate to which the new mode of transport was developed.

It we look back to see what the Victorians were writing and saying, for example, we can *come across much of the same* kind of environmental criticisms of the railway builders as are now levied at the road planners. We can even find similar arguments being made about the need to preserve and make fuller use of canals as are now said about the railways.

Peaked

To this extent, therefore, we ought not to be surprised by the *fact that the volume of road* building has peaked out or is likely soon to peak out in most industrialised countries as well as in Britain. Once the main networks have been laid down and the aspiration of having *one's own transport has become* close to being a reality for most businesses and households, then the pace of new construction is bound to begin easing off.

Nor should one be altogether surprised by the welter of *criticism which road building* has aroused. The planning and construction of new roads may promise both social and economic benefits to those who will use them—including, one must add, the benefit of cheaper and speedier deliveries to shops and stores. But the process causes very considerable disturbance to the communities through which they are being cut.

To some extent, too, the opposition was stimulated by the particular manner in which road planners set about their task in the 1950s and 1960s. They tended to build roads on the cheap to suit civil and traffic engineering considerations and *with insufficient regard for the* impact they would have upon the neighbouring environment including, in several instances, the well-being of those who lived or worked in "riparian" premises. The early wave of enthusiasm for road-building, which infected politicians and the public generally as well as the engineers, led to dizzy ideas about carving magnificent new concrete expressways through our congested cities. Was it not Dr. Buchanan who *argued that this was the way to* preserve the urban environment, just as the way to safeguard the peace of a hospital ward was by having corridors through which staff and visitors could circulate?

Other factors contributed too—for example, the trend towards larger lorries (something else to which the politicians initially gave their blessing). Bigger vehicles helped road carriers to limit the growth in the size of their fleets, far more so than the growth in the volume of freight they carried as well as in the numbers of cars and vans.

Indeed, the actual figures *show a 10 per cent fall in the* number of lorries of more than 1½ tonnes unladen weight in the last ten years, a period during which freight ton-mileage by road grew by 30 per cent. and the number of cars and vans increased by 55 per cent. But, perhaps because to-day's lorries are bigger, there is a widespread belief that the number has in fact increased.

Then there was the shock of the OPEC oil cartel and, the sudden realisation that perhaps one day the supply of fossil fuels—especially oil—might be exhausted; the desperate search for public expenditure cuts at a time when road-building no *longer* won many votes; the desire to ease by subsidies and other mechanisms the threat that the use of cars for leisure and travel to work was increasingly posing to the economics of bus and rail passenger operation; and the growing doubt about the ways in which the case for particular new road schemes have been evaluated and presented, doubts which the recent Leitch report has in part supported.

All these factors have contributed to one degree or another to the decline in the roads programme. In the past four years expenditure on new construction by local and central goverament has been *reduced by 40 per cent. in real* terms and expenditure on maintenance has been cut back by 20 per cent. Compared with planned levels of expenditure, the cut-backs have of course been even greater.

At one time in the early 1970s, the construction of some 3,500 miles of strategic routes—motorways and dual carriageways—was envisaged by the early 1980s and a total of 4,200 *miles by the mid-1980s.* By the mid-1970s the initial target had been reduced to 3,100 miles and deferred to the second half of the 1980s which the later target of [illegible] miles had been put off to the 1990s. To-day, with some 2,500 miles of motorway and dual carriageway roads in use, the targets are even more uncertain.

The programme, last year's transport policy White Paper declared, will now be a flexible one. Routes are to be improved *piecemeal with different* stretches being improved in different phases to differing standards. Parts of some schemes will be built to motorway standards and other parts to dual carriageway or even single carriageway standard. On some routes it will be a case of a staggered construction of by-passes around the worst trouble spots, leaving the gaps in between to be tackled later—if at all. In any case, following a decision announced a couple of years ago, new roads are now being built to reduced design standards in relation to the volumes of traffic that are expected.

Peculiar

It is difficult to resist the conclusion that the pendulum has swung too far too quickly. The case for a particular size of road-building and maintenance programme may not be an easy one to establish. But it always seemed a peculiar form of logic to argue, as Ministers did, that investment in new roads should *be cut back in order to make* more resources available for the subsidisation of bus and rail passenger operation, when the case for these subsidies rested upon the need to assist public transport against the competition of the private car and the case for road construction had rested on the need to expedite and cheapen the cost of moving freight.

Similarly, one is bound to suspect that road-building became a natural target for spending cuts because it was capital expenditure; and it is always much easier politically for governments to cut back on capital expenditure rather than current expenditure *(and thereby pass* the problems of redundancy to the private sector).

Furthermore, the reductions in spending have had the effect of delaying even further the achievement of the Government's own current road programme priorities. The regional needs of Scotland and Wales have to a large extent been insulated from the cuts but not those of the South-East. The M25 orbital route around Greater London and the M11 towards East Anglia, which featured in the original 1,000 miles target of the Macmillan Government, will now not be completed before the mid-1980s. The improvement of routes to ports, such as Southampton, Harwich, Tilbury and Folkestone, is still a long way short of becoming a reality. The industrial needs of the Midlands have still to be properly served, and there are a very large number of towns and villages awaiting to be relieved by by-passes.

The critics of road building may say it is all very well basing priorities upon industrial, regional and environmental con*siderations but road users—in*cluding road carriers especially—must pay their full proper share of the costs of the infrastructure they use. In principle, there is everything to be said for this last point. But one must have regard for the practicalities.

First, it is not easy to calculate precisely what each mode and what each user should bear. Attempts have been made for well over two decades both here and on the Continent to arrive at a workable formula for identifying, measuring, and allocating road track costs. Even if the direct costs—construction, maintenance, policing, accidents and *so forth—can be identified and* measured, the allocation between and within different categories of users is bound to be arbitrary.

Then there is the question of the indirect or external costs—such as noise, pollution and damage to amenity. Should one try to evaluate and charge these, or would the better approach be to tackle these problems directly through progressive improvements in vehicle technology and design? Where would the incentive for improvement be if these aspects were subsumed in vehicle and fuel taxation? Is it not better to set *progressively higher* standards through *legislation.* The cost of improvements and the research that led to them would still be borne by the user (and thus by his customers, which means you and me). But in the meantime the problems of noise and pollution would have been reduced.

Furthermore, it is not the road-carriers fault if the ratio between track costs and fuel and vehicle taxation falls. It is the fault of governments for failing to adjust these taxes in line with the rate of inflation. In any case, the ratio can change between a boom and a recession, as well as according to whether road investment is charged on a "pay-as-you-go", or "public enterprise" basis. Above all, the idea of charging track costs through the taxation system is intended to provide a measure of parity of competitive opportunity to all freight carriers, irrespective of mode, rather than simply to protect railways.

In practice, because rail freight is now expected to meet only its "avoidable costs", it makes hardly any contribution to rail track costs. Indeed, these costs for both freight and passenger operations are now wholly borne by the taxpayer. One may be included to accept this is a form of rough justice. But it underlines the difficulties of trying to apply the track costs approach with any degree of sophistication.

C.J.

Developments in road transport

COMBINATION of more trade with Europe and ...ing, though less urgent. ...d for road transport to ...iddle East continues to ... conditions resulting in ...ges of permits for vehicles ... through European coun-

...ough the difficulties of ...ors have been lessened by ...at easier conditions in ...l producing countries ...lves, the basic objections ...tries with heavy transit have not changed. If ...g. there has been a ...ing of environmental ...ion.

...also clear that from the ...r's point of view, the of different transport has increased the need s of cost to get the right ...ation. This choice de- ...n a number of factors ... the speed of delivery type of goods concerned. ...iew of the Department ...sport on the future of ...perations is that permit ...s will continue for the ...ible future. It will ...e be necessary for contractors to continue ...icipate in co-operation ... and use road-rail ser- their operations are not ...stricted.

...iator

...epartment, in its impor- ... as mediator on routes, ...uing to anticipate areas ... difficulties may arise. ...e. It said in a recent ...n permits that experi- ... shown that a sudden ...of road traffic can lead ... to impose heavy taxa- ... capacity restrictions, extremely short notice. this happens those ... without bilateral ...its are at a double dis- ...e; they have no legal protection against the ...sures and find them- ... the end of a long queue of countries seeking bilateral agreements," it said.

The most recent developments are the negotiation of agreements in varying stages with the Soviet Union and a large number of countries to the east ranging from Turkey to Afghanistan. The department is also watching developments in northwest Africa on the grounds that this could become a key route to West Africa, although nothing has yet happened there to any great extent.

As in European countries, the old problem is that most of these countries send virtually no vehicles to the U.K., so the U.K.'s bargaining position is not strong.

Discussions have also taken place with the Republic of Ireland where, until recently, the balance of advantage appeared to lie in not having an agreement with the Republic, since in practice most British hauliers could obtain licences from Dublin without difficulty, but this position has shown signs of changing.

The most consistent cause of discontent among hauliers is the allocation of permits, on which the Department of Transport's stated aim is to get the best use out of the scarce permits available. However, this policy is open to a certain degree of interpretation.

Ideally, it is suggested, vehicles should be fully loaded in each direction with goods of the highest value and the original allocation system sought to put these principles into practice. But as traffic volumes grew the system was found to be too cumbersome.

It was therefore progressively replaced with the block allocation system, based on the number of permits received in previous years. But this, too, presented a major problem by creating a closed shop of existing operators—one which in turn was partially resolved by the use of increases in quotas.

Half of quota increases is now used to improve the existing block allocations and the other half to admit companies without block allocations, providing opportunities for growth to those already in the market and at the same time admitting new companies.

Policy

As the department points out, however, the selection of these new companies is extremely difficult, given that only a limited number of permits is available. The first of these decisions is whether to give relatively few operators a relatively large number of permits or whether to share them more thinly among a larger number of companies. The decision as to which operators should be chosen is even more difficult.

In general, the policy pursued by the department is to assist those companies which have demonstrated some degree of self-help, particularly by use of co-operation quotas or the road-rail systems.

In 1976, however, after a substantial easing of the French quota, an experiment was attempted under which any operator who chose to apply was given eight French permits. More than 1,000 companies did so and, despite complaints about the limited number, they were at least allowed into the market.

One of the most important recent developments has been the increased traffic through East Germany (the German Democratic Republic). This growth was encouraged by the move from Ludwigsberg to Munich of the W. German Federal Railway's piggy-back terminal, with a substantial increase in the price charged.

Of the countries on the route only Hungary imposed a quota, of which in previous years only about one per cent. had been used by British operators. However, use of that route grew to such an extent that in the summer of 1976 its use had to be restricted because of pressure on the Hungarian quota. Although the restrictions were subsequently eased later in the year, it became clear that Austrian and Hungarian permits would have to be added to those for which annual allocation systems had to be devised last year.

The most recent negotiations have taken place with Iraq, Syria and Jordan, and meetings with representatives of each country have taken place. An agreement has been reached with Turkey, operating from the start of this year, which provides a quota large enough for British needs.

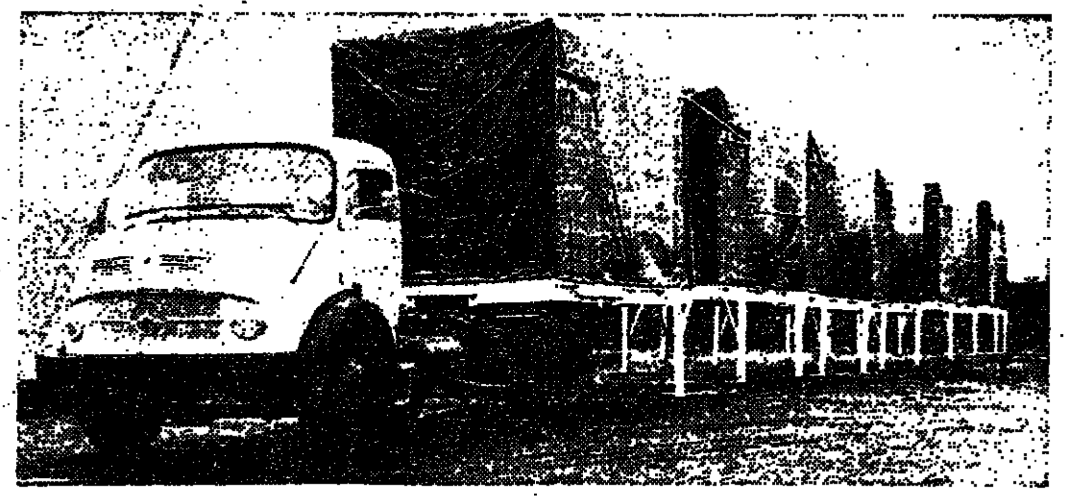
The department has also received a surprise approach from Afghanistan to negotiate an agreement, largely because of that country's new policy of transporting exports such as skins and similar goods overland through Europe. Cyprus has made a similar approach for negotiations.

Within Europe itself the most significant change for some time has been the 20 per cent. increase in the EEC quota, the first since the 1975 ruling which pegged the number of permits at 272. A meeting with Italian representatives has also taken place, again for the first time in three years, which resulted in an increase of 30 per cent. in the quota and a generally more relaxed attitude on their part.

The major concern in Europe at present is the attitude of Austria, which is seeking to impose a large increase in tax from July 1—assuming that this measure is passed by the Austrian Parliament. The EEC is in the meantime bringing considerable pressure to bear on the Austrians and has made hints that EEC aid for infrastructure developments may be available if a softer line is taken.

Lorne Barling

Trucks of the future



Demountable refrigerated box van bodies by Crane Fruehauf Rigids. This particular consignment, destined for Iran, has refrigerated devices in the side walls which are completely self-regulating.

FIGURES for the first ...1978 are anything to go ...he heavy goods vehicle ...as come through the ...of the end of 1977 and ...the growth trend it ...lished for most of the ...ad of that. This is ...rice rises, increased costs and the prospect ...antial increases in ...ay.

...ector has tried to ... its car-producing ...y venturing the hope ... increases in vehicles ...e kept to two a year ..., again as with cars, ...ing up four times a ...he industry struggled ...vith high inflation in basically a depressed

... the all-important ... facing the industry are the extent of the recovery, the extent to ...at will benefit truck ... and which truck ...vill benefit. In the past ..., although the small- ...ium lorry-buyer has largely faithful to the ...roduct, the market at ... end has become a ...nd in which the Euro- ...rters have reaped an harvest, at least in market penetration if ... in profits

...e U.K. builders are ...ick, with Leyland pro- new version of the for the recent truck ... Amsterdam and ...aving already updated ... The smaller pro- ...e Foden, ERF, and Atkinson have all their vehicles in order ...e with the European ...n in Britain and to ...heir own chances of the Continent.

... all this activity has revolution in the ...of comfort provided ...ivers. Previously the were able to adopt a ...valier attitude which ...ed the mollycoddling ...ivers, who were ex- ... shake their bodies ... their eardrums to ...n, freezing in the ... being nearly roasted ...e summer.

...s a result of union ...it mainly as a result ...manufacturers setting ...gher standards, cab have been improved ...J.K. industry has now ...ght up. This is likely ...te downwards so that of all cab interiors, ... short-haul smaller likely to improve over five years to the point where commercial vehicle manufacturers will be working to the same standards of driver comfort as apply to cars.

At the same time, however, operators are still cost-conscious and there will come a time when all manufacturers will have reached an acceptable standard of cab comfort, at which point other considerations will come to the fore.

Already in Europe one of the main selling points is on cost per kilometre. This takes in not only the fuel consumption and servicing charge but average downtime due to breakdown and time lost in waiting for parts. Manufacturers are keen not only to emphasise reliability but also to build up their spares and service back-up.

This is happening in Britain too, with most of the major manufacturers offering a 24-hour emergency breakdown service and a priority parts delivery service in order to persuade buyers to use their lorries.

Methods

Other persuasive methods of a more traditional nature have also been the order of the day—sometimes for a distributor it is worthwhile making very little profit on the initial tractor sale if he can make it up in future parts and service sales—but the manufacturers can ill afford to squeeze their margins by too much for too long.

In the meantime engine manufacturers seek to improve the fuel consumption figures—Cummins for instance recently introduced a big-cam version of their 290 hp engine which the company claims will improve miles per gallon by 10 per cent. This has yet to be proved, however, and is also dependent on a good marriage with the right gearbox, axles and tyres.

In all of these areas more work is being done but perhaps the single most significant move forward will be European agreement on standard specifications at the heavy end.

At the moment the strongest rumour of many that have emerged from the depths of the EEC Commission over the years is that some sort of consensus is forming around 7 bhp per tonne with a maximum weight of 40 tonnes. Undoubtedly this would at best take a long time to ratify and at worst will be thrown back into the melting pot.

There is also a wish among both tractor and trailer manufacturers to move where possible to the Eurotruck, although here it could be the traditional attitude of the operators looking for a bespoke lorry, rather than the intransigence of national legislators, which will hold up uniformity.

Trailer and body manufacturers in particular would like to see some standardisation—recently Crane Freuhauf formed Freuhauf Europe to look at overall European opportunities—but progress is likely to be slow except in certain areas like curtain or aluminium-sided tilts which are used on a pan-European basis.

There is also some growth in the market for demountable bodies but as an alternative to a fifth wheel articulated trailer it will be some time before they are a serious challenge.

There is also the question of an increasing amount of legislation, particularly where a lorry is being used to transport food. More and more countries now require refrigeration of more and more varieties of food—good business for the small diesel power-packs for refrigeration such at Petter—while at the other end of the scale the cost of building tankers has meant that users now want to be able to use them both for liquid and dry goods.

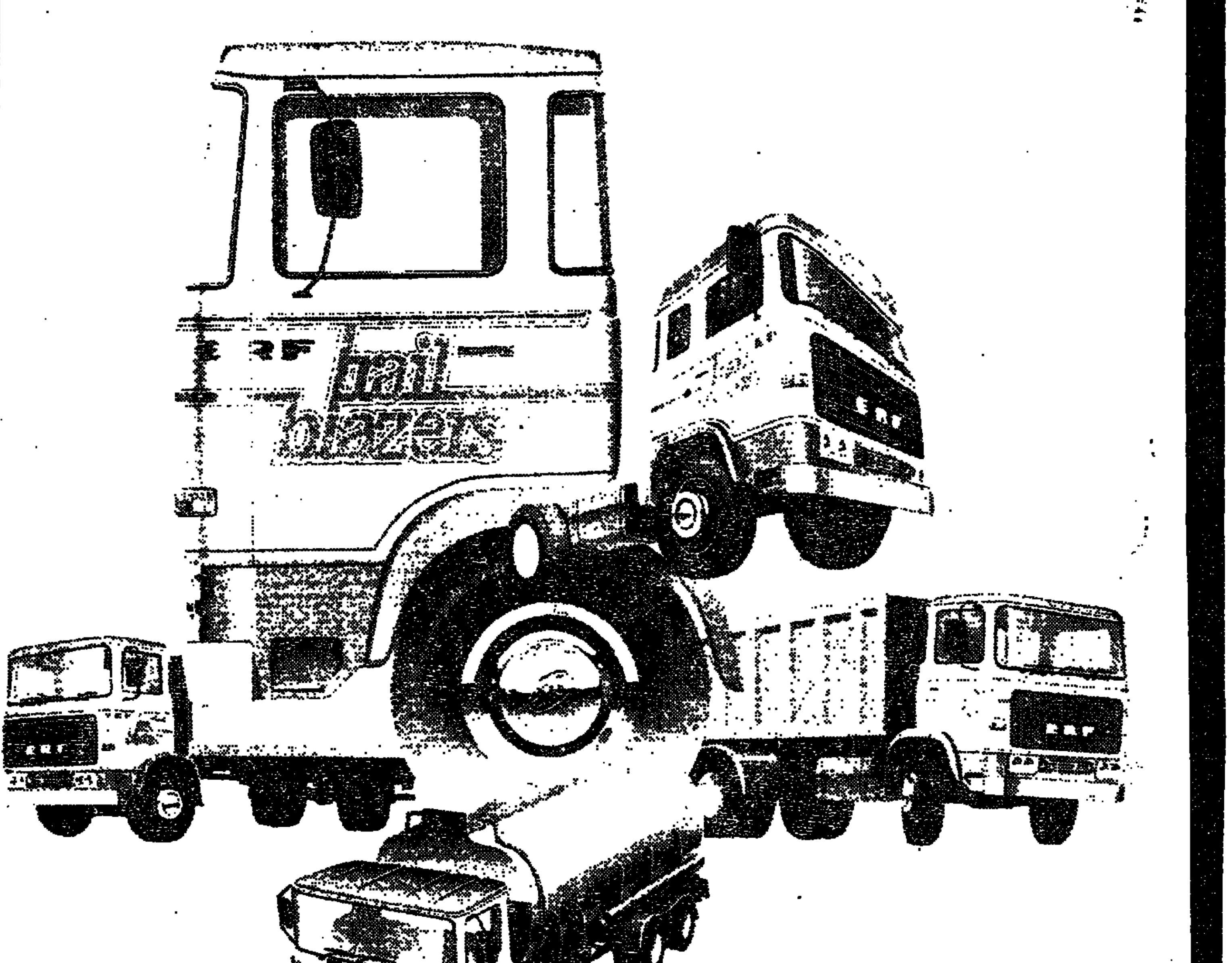
There is some evidence now that some of the recent surge in buying has been caused by a number of people coming into the market who have held off replacing their vehicles for as long as possible but can hold off no longer. This has been helped by optimistic noises from the politicians ahead of the Budget and the knowledge that the Government could find it difficult to maintain wage restraint, whether voluntary or statutory.

Whatever happens it seems certain that the heavy goods vehicle will remain the principal means of both medium- and long-distance transport in this country and that we shall be living with big lorries for some time to come. Although there are periodic outbursts of protest, it seems that the lorry will have to be accommodated, though its operation is likely to be improved and the routing of the roads it uses can play a large part in making it more acceptable.

Most people do not want heavy lorries in the centre of their communities, but then most lorry drivers would rather avoid going into them.

On the technical side emission and noise controls coupled with smoother and more economical performance are the main goals and the industry is striving hard to make advances in these directions. If for no other reason success with one or another should produce commercial success as a result.

Stuart Alexander



Shipowners at odds over policy

"AS I watch these two different areas of my responsibility, shipping and civil aviation, I ask myself whether perhaps shipping is not moving in the direction of civil aviation, freedom by regulation instead of freedom by right." So said Mr. Edmund Dell, the Trade Secretary, in an address to the General Council of British Shipping at the end of last year. The tone of his speech was one of hints rather than proposals, but it struck in the direction of a theme which, apart from the general condition of the economy represents the greatest source of anxiety to shipowners.

The question raises itself from a variety of angles. On the one hand we have the long-drawn-out saga of confrontation between U.S. anti-trust philosophy and the self-regulation of liner shipping through the conference systems: on the other the free-booting competitiveness of the Russian merchant marine, which has undercut its way to a significant presence in a number of the world's most lucrative cross-trades.

Surrounded by such diverse antagonists, European shipowners are having the utmost difficulty in maintaining a systematic defence of their practices and indeed of finding anything like basic agreement among themselves. There appears to be general support for the proposition, for example, that the best way to deal with the Eastern bloc threat is by concerted action through the EEC, but there is little common ground about the fundamental question of access to trades, as we have seen in the sometimes bitter differences of view between member States over the UNCTAD liner code.

One of the problems is that shipowners have not traditionally welcomed the attentions of Government other than in strictly defined areas such as safety, crew standards and the like. Now the industry is faced with a number of international political issues which it does not possess the power to resolve itself. In no other industry is the world-wide debate about protectionism so pertinently focused.

The timetable for processing all these issues remains uncertain, but if last year was principally one for bilateral efforts to alter Soviet policy—Ministers from West Germany and Britain visited Moscow on the issue—1978 will be the year of forging a common programme within the EEC.

Mr. Richard Burke, the EEC Transport Commissioner, has said the objective is more to repair trade defences within the Community in order to negotiate from a position of strength than to seek a confrontation, but there is a body of opinion among shipowners which believes tougher direct action will be called for sooner rather than later. Certainly there is agreement that firm and public commitments to restrain expansion must be won from the Russians before the formulation of the next five-year plan to run from 1980. By the end of the present plan, a further 1m. deadweight tons will have been added to that fleet, which is now the sixth largest in the world.

The Western argument is that the Russians are using State-financed ships to undercut liner conference rates (although the Soviets are members of about a dozen conferences) in order to earn foreign currency and possibly even to undermine the viability of Western merchant shipping. On some routes a Comecon share of 35 per cent. has been achieved in a period of three or four years and in the last five years, traffic on the Trans Siberian Railway has quadrupled, amounting now to about 15 per cent. of the total Europe-Far East trade.

So far the Russians have shown themselves willing to talk, but unwilling to produce tangible evidence that they intend to restrain their shipping lines or their railway. The Whitehall view is that this leaves the West with no alternative but to prepare the ground for action against the Russians, with the hope that the evidence of preparation will itself jar the Russians into a change of heart. So far this preparation has involved persuading governments which lack powers to discriminate against a foreign fleet to take them and the Belgians have undertaken to fill the remaining significant gap within the EEC —a gap which has bestowed upon Antwerp the nickname of "the largest Soviet port in Europe."

Token

Once the national powers are in the statute books or close to being there, we can expect some formal declaration of annoyance from the Community and perhaps eventually token acts of discrimination against the establishment of Eastern bloc shipping agencies in Europe or special levies or quota restrictions on Comecon shipping movements.

The EEC will also have to come to grips this year with divisions among its members over the UNCTAD liner code, which enshrines the principle of a 40/40 seaborne trade share-out between the countries of import and export, leaving 20 per cent. for cross-traders. France, Belgium and Germany have already signed the code, which is anathema to a country like Britain whose merchant fleet is predominantly dependent upon cross-trading. Having put up several proposals in the past two years, all of them entirely unsuccessful, Britain is now trying to come up with a new position in time for the June Council of Transport Ministers, at which Whitehall fears an onslaught from the code's supporters who are anxious to win for their own merchant fleets a greater slice of business.

On the U.S. front, European shipowners were much relieved to see the heavy defeat of the Oil Cargo Preference legislation last autumn—a move which could have had heavy repercussions in the trade protection scenario. But 1978 still holds out the threat of the Grand Jury investigation into practices by shipowner members of the transatlantic freight conferences.

This has been a slow-moving process and even with the Grand Jury now empowered and the first subpoenas issued, it will probably be six months before the Department of Justice makes its representations. In the meantime, shipowners and shippers are barred from exchanging views and information to the considerable annoyance of both sides. It was no doubt in part this lack of communication which led to the fiasco of the Atlantic emergency surcharge to cover shipowners for losses sustained during last autumn's longshoremen's strike. This levy has been negotiated and re-negotiated as a result of the volume of protest from shippers.

But at least on these large-scale matters of international trade U.K. shipowners have been more or less at one with their Government. Even in the recent deliberations of the Inter-government Maritime Consultative Organisation conference on tanker safety and pollution, the Department of Trade negotiators had pretty solid backing for a complex package, some of whose effects were problematic for sections of the industry. Such unanimity is far from being the case in one of the matters of most pressing concern to shipowners—the nature of Government subsidisation for shipbuilding.

About £380m. was spent on such subsidisation within the EEC alone last year and shipowners are watching anxiously to see whether the Brussels Commission can produce an effective formula to get shipbuilders to reduce their capacity. Viscount Davignon, the EEC Industry Commissioner, has declared his favoured target to be a cut of 46 per cent. in overall capacity by 1980, but Britain has been among those vigorously resisting such a programme.

As shipowners see it, the policy of grants and cheap credit for ships as exemplified in British Shipbuilders' £115m. deal with Poland and almost complete orders for India and Vietnam, is simply encouraging developing countries to expand their bulk and general cargo fleets rapidly at a time when virtually every sector of the market is grossly overtonnaged.

The shipbuilders' defence is that they merely feed and not create the maritime ambitions of the developing world. But whatever the power of the arguments, it is self-evident that the serious overcapacity in oil tankers which developed from the collapse in world trade and the quadrupling of oil prices in 1973 has slowly spread through dry bulk shipping into general cargo trades. Some shipowners feel that the last sector is more seriously threatened than the others because the source of the new capacity in the developing world is less responsive to the fierce market pressures which will eventually re-balance the bulk trades.

Collapses

So far, there are few signs of comfort for the shipowners and many are predicting a year of collapses among those companies exposed in the bulk shipping sector. Only the funds of the Norwegian Guarantee Institute have so far prevented widespread failures among tanker and bulk ship owners in that country and the re-scheduling of debts at the end of last year by Japan Line, one of the world's biggest voyage market tanker operators, brought a significant shiver to the Far East shipowning community, involving even the Hong Kong magnate Y. K. Pao through his extensive charter ties with Japan Line.

Within Britain it is the smaller and mainly privately owned bulk operators who are under most pressure, although one quoted company, Reardon Smith, has been struggling mightily in the past year to deal with its tanker losses.

Even the liner trades, on which the success of the larger British companies has been founded, face difficulties, not only from the Russians, but from niggling port labour problems in container trades and from a serious bout of port congestion in West Africa. In the Middle East congestion has eased, but competition continues at a level too fierce for all to survive. It is in the Middle East, too, where the isolated boom in trade has fuelled a massive increase in shipping services that the old conference structures have simply failed under the strain.

Many of these problems will, of course, fade in significance as world trade quickens, but shipowners are worried, along with Mr. Dell, that the old liberal trading days with relative freedom from Government stakes in shipping companies and detailed regulation of their rates may be gone for ever.

I.H.

Worldwide surplus of bulk carriers

TANKER OWNERS, accustomed to the pressures of a deeply cyclical trade, are reluctant to label any one recession as the worst in their relatively short maritime history, but most agree that the scale of the present crisis surpasses its predecessors if only because the scale of the losses has reached such numerical heights.

A VLCC at present worldscale rates can be losing its owner anything up to £250,000 a month and although in many fleets this drain is offset by the value of time-charters concluded when the market was higher, many of these period deals are moving close to expiry in what is now the fourth year of slump.

Strength

For the larger shipowners, such as P & O, the result is worrying but not critical because of the strength of diversification in liner shipping and indeed non-marine activities, giving it the corporate ability to survive. But for those Norwegian owners totally exposed to the climate of the spot market, trouble came early and has only been prevented from getting out of hand by the activities of the State-funded Norwegian Guarantee Institute.

It is a matter of speculation just how long such a State fund and the private banks are keeping shipowners alive simply because this is preferable to becoming the owner of tonnage whose value has dropped by between 25 and 50 per cent. in 1977 alone. One theory is that when the private banks lose their staying power, governments with significant maritime interests will step in to take their place—a view which has been strengthened by the promptness with which the state-owned Japanese Development Bank led a group of commercial banks into a moratorium on debts for the ailing Japan Line in December.

No one knows to where this process is leading. It could produce a number of large State-owned shipping companies for the first time in the West or it could, as indeed it already partly has, simply give governments the opportunity to pick and choose who shall be saved and who shall merge with whom. These are almost certainly choices for Norway and Japan in 1978, but less clear is the fate of the Greek independent owners, heavily reliant on an increasingly depressed dry bulk market and whose flag loyalties outside their financial homes makes them less likely to be given government props. Within Britain, which has 28m. dwt of tankers and 14m. dwt of bulk ships, many in the industry are predicting collapses of smaller, mostly privately-owned owners, but until these things happen and asset values are studied, it is impossible to say whether such companies will find buyers.

Much depends of course on the duration of the crisis, a point on which there is some disagreement by brokers, researchers and owners, although almost everyone is resigned to the fact that for crude oil carriers the upturn is at least two years away and a substantial number of forecasts say that supply and demand will not balance before 1985, giving the industry a decade of losses from which it cannot possibly emerge without radical changes in structure.

Traditionally it has been a slump which has broken the ground for new entrants into bulk shipping and there is much speculation within the industry as to who possesses the financial backing to venture into a risky and extremely capital-intensive business when the upturn comes. The obvious candidates are the Arab oil-producing countries, whose maritime ambitions have already led to the creation of a handful of single State or Pan-Arab ventures.

Upturn

These ventures have, given their birth at the tail-end of the boom in 1973-74, found market conditions very tough, but at least they will enter the upturn with some experience and the liquidity which many of their Western competitors will lack. Other bankers argue that although the equity base of some customers may have been destroyed in the crisis, the European and American banks will be ready to advance into "floating real estate" again, although for the time being all their talk is of no loans without secure charters.

It is true also that even with 41.5m. dwt of oil tankers and 15.2m. dwt of dry bulk capacity laid up, according to H. P. Drewry, at the end of January, there are small areas of the market where shipowners glimpse immediate opportunity and others where they see signs of an improvement in trading conditions.

In the crude carrier business, for example, there is a feeling that tonnage in the 70,000 to 80,000 dwt bracket will be needed to fill gaps in trades to the U.S., where there is a shortage of deep-water ports.

But everywhere there are more factors generating uncertainty than certainty. In the product market, overcapacity of refining facilities makes future import flows difficult to predict and although President Carter's energy plan of last spring has so far had little effect, its goal of cutting U.S. oil imports to 300m. tons by 1985 is still a source of anxiety.

It was mainly the 65m.-ton increase in demand by the U.S. last year, when imports totalled 430m. tons, which gave an estimated 6 per cent. lift to worldwide seaborne oil movements. Port conditions in the U.S. have also ensured an increase in employment for some smaller crude carriers which had begun to look obsolete. These vessels are increasingly used for lightening VLCCs into smaller vessels off the U.S. coast.

At least for oil tanker men, though, there is the comfort that orders for new vessels have become almost non-existent and although the tail of newbuildings contracted during the boom increased the fleet by 12m. dwt last year, 1978 deliveries may well be offset by scrappings and in 1979, unless there is a flurry of orders, the fleet may well start to shrink.

On top of this, oil tanker men are starting to accept that tonnage laid up for a period of years, even if it entered lay up in good condition, is increasingly unlikely ever to be fit for service again. Over 9m. tons of tankers were scrapped in 1977—a lower figure than for 1976—but this process could well be accelerated either by Government promotion of "scrap and

Continued on next page.

Pressures on the ports

NDEROUS recovery of itish economy from has had a clear impact rading performance of itry's ports in recent :d the climb back to vels prevailing before been slow and arduous. ith depressed trading s the ports have had 'ith a revolution in the of handling general 1 a dramatic change in of ships using their

problems in some ports have recently in congestion, with lines switching their o other destinations. ias been overshadowed iaos existing in ports other countries, where h in trading patterns he OPEC bloc has put edented burden on the ities of these rapidly g countries.

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ld trade slowly ex- amount of inward and eight through British be expected to grow. ccording to the latest y the National Ports on-fuel traffic is ex- grow by some 38m. the five years from trough of the reces- 30, reaching a total of 146m. tonnes in that

ucceeding five years growth is likely to be at a rather lower rate, with non-fuel traffic expected to expand by a further 26m. tonnes. By the end of this period there is a prospect that some stability will return to the level of conventional traffic being loaded in and out of U.K. ports. But for some years to come ports will experience a slow but inevitable decline in the amount of traffic handled across conventional berths as the change-over to unitised cargo is fully implemented.

The total of conventional general cargo handled in British ports fell by some 9m. tonnes from 1971 to 1975, and with this decline continuing, albeit at a slower rate, a further loss of 3m. tonnes is expected by 1980. In 1975 conventional break-bulk vessels carried 12.7m. tonnes out of a total general cargo traffic of 62.6m. tonnes.

But if the traffic in conventional cargo will at best stagnate, and at worst show a marked decline, traffic moved by container and ro-ro vessels and specialised bulk cargoes will grow significantly in the next 10 years. Unit load traffic is expected to reach 53m. tonnes by 1985 compared with 27m. tonnes in 1975 and traffic carried on specialised shipping—mainly chemicals and forest products—will be about 39m. tonnes compared with 23m. tonnes in 1975.

Scope

According to the National Ports Council's analysis, unitised traffic, which already accounts for 25 per cent. of the non-fuel traffic, should have increased its share to 30 per cent. by 1985. It is on the deep-sea routes that this expansion can be expected to take place most rapidly because of the scope which still exists for conversion to unitised services. But nonetheless even by 1985 it is still the short-sea and domestic routes which will take the lion's share of the total of unitised traffic, claiming some 75 per cent. Of the unitised traffic ro-ro services already account for about 60 per cent. of the cargoes and there will be a gradual increase towards two-thirds by 1985.

FOREIGN TRADE THROUGH UK PORTS

(m. tonnes)

	1974		1975		1976	
	Imports	Exports	Imports	Exports	Imports	Exports
Total goods traffic	213.7	50.4	175.1	47.9	181.1	52.1
Fuels	133.4	20.0	106.7	18.9	102.6	22.5
Non-fuels	80.3	30.4	68.4	29.0	78.5	29.6

Source: National Ports Council.

But whatever the increases in trade in coming years the port capacity should exist in the U.K. to cope with the demand. But doubts have recently been expressed about the quality of service available in British ports, especially in comparison with some of their major Continental rivals, and shipping companies are known to be understandably concerned at the level of port charges in the U.K.

A report drawn up late last year by the National Ports Council in conjunction with the General Council of Shipping and the British Ports Association suggested for instance that the port of Antwerp could load and discharge ships almost four times faster than London. On ship turn-round times Antwerp was three and a half times faster than Hull and three times faster than Glasgow. This controversial survey covered 11 ports — Antwerp, Bremen, Hamburg and Rotterdam on the Continent, and in the U.K., London, Liverpool, Hull, Avonmouth, Tees, Glasgow and Grangemouth. Only Grangemouth and Tees showed up reasonably well against their near European counterparts.

For comparable export cargoes it is shown that a ship would spend at berth three and a half days in Liverpool, and two and three quarter days in London, Glasgow and Hull for each day that it would spend in Hamburg, Bremen, or Antwerp. Other figures produced in the report indicated that it could take about three times as long to discharge the same cargo in Liverpool or Avonmouth as in any of the four Continental ports. On imports Antwerp again scored impressively against the British ports. Dockers there handled on average 2.8 tonnes per gang hour as against one ton in Hull and 1 1 tons in Liverpool.

Not surprisingly the report has aroused considerable controversy in the ports industry and many charges have been levelled against the authors that they have failed to compare like with like.

The National Ports Council has for long been mindful of suggestions that there was a big difference in the productivity performances of ports in the U.K. and on the Continent and has been studying the practicalities of making such a comparison for a number of years. The report covers only conventional general cargo, which is a small proportion of the total tonnage of cargo now handled in major ports. It is also often handled in the older parts of a port, where there has been less emphasis on investment in new equipment.

Furthermore, the industry has pointed out that a fair comparison cannot be made because U.K. ports do not receive government subsidies, as do their Continental rivals. Other factors can also affect the performance of one port against another, such as the state of stowage, whether a port is the first or last port of call for shipping lines, as is often the case in London, and the level of wage agreements with the dock labour force.

Attempt

However, the report was compiled from material collected from the industry itself, and apparently every attempt was made to make the basis of comparison a fair one. It is felt in some quarters that the report has done little more than add official statistics to a state of affairs already known.

Major investment schemes for new port facilities have also had their share of difficulties in recent months, but at both Bristol and Southampton agreements have now been reached which should allow these projects to progress.

At Bristol working operations at the new £37m. West Dock have received the go-ahead after a six-month union boycott. The dock, which is equipped to handle container traffic and roll-on roll-off traffic, has never commenced operations, despite the official opening by the Queen last August. It now faces an uphill battle to attract new services to the enclosed dock, the largest in the U.K., but it has already had some success, attracting the attentions of the Swedish-owned Tor Line, the Norwegian Gearbulk, and the Montreal-based container line Cast.

At Southampton a new manning agreement should mean that the way is now open for the container berths for the newly unitised South Africa trade to be brought into use. Since the start of the service last year Southampton trade for this route has had to be transshipped to continental ports.

The small scale of congestion that has occurred in some U.K. ports is minor compared to the way ports in the OPEC States and in some of the poorer developing countries have become clogged with much higher volumes of trade. At times delays reached extraordinary proportions — at Lagos Apapa, Nigeria—as H. P. Drewry pointed out in its report on Third World port development—on some occasions in 1975 more than 400 vessels were idle, with delays for individual ships exceeding 400 days.

Recently many OPEC ports have seen the fruit of port expansion and improved management, and congestion has been substantially reduced. The rush to build new berths has even given rise to fears that there will be dangerous overcapacity developing by 1984 and moves are being made to cancel some of the more ambitious projects.

Kevin Done

Carriers

CONTINUED FROM PREVIOUS PAGE

build" schemes (a policy attractive to Governments which are, for the most part, much more concerned to protect their shipbuilding industries than their shipowners) or simply by a boost for the scrap price which would occur on the hint of a pick-up in world steel trade.

Iron ore and coal for the steel industry account for half the employment of the dry bulk fleet—a fact which gives instant explanation of why these trades were in such doldrums in 1977. Grain, the third big dry bulk commodity, was livelier last year thanks to another shortfall in the Russian harvest.

Although it is at least arguable that the steel industry will start to stimulate bulk shipping by the beginning of 1979, any optimism among shipowners is quenched by the effects of new bulk tonnage coming into the market. This amounted to 12m. tons or 13 per cent. of the fleet in 1977, largely as a result of tanker orders converted into dry bulk contracts, which in 1974 seemed a better at least by the beginning of 1979. have now also dried up, there is still another 11m. tons in the yards to be delivered by 1980. There is, however, evidence that some of these orders are being cancelled.

One of the few bulk sectors which did offer good returns last year was the shipment of cars, chiefly from Japan, but this is a market which cannot last as deliveries of specialised car carriers come on stream. It will be even more short-lived if heavy importers like Britain are persuaded by their domestic industries to raise trade barriers.

All these factors suggest that bulk shipping markets as a whole are unlikely to be in balance before 1980/81, given that the fleet is relatively young (around 80 per cent. of vessels over 18,000 dwt aged less than ten years) and that combination carriers which account for about 20 per cent. of bulk movements are unlikely to be drawn off into other trades.

Given this surfeit of gloom, it is remarkable that shipowners are still capable of thinking about how to proceed when the tide does begin to turn. One of the most interesting questions at stake is whether tanker owners will go on building bigger vessels.

A study last year by consultants H. P. Drewry suggested that ULCCs (over 300,000 dwt) would probably have to get bigger if they were to be fully competitive with the VLCCs which will be able to travel in ballast through the enlarged Suez Canal from 1980. ULCCs frequently have to discharge at more than one port or lighten their cargo into smaller vessels, which increases costs.

Certainly Mr. Ravi Tikkoo seems to believe the argument. He has recently renewed his letters of intent with a U.S. yard for the building of three nuclear-powered 600,000-ton tankers. Others question, though, whether nuclear power in the present environment-conscious age will ever be an acceptable solution to the problems of driving such large vessels.

This is hardly likely to be the dominant theme of 1978, however. A more likely candidate for that is talk of liquidity and the independent tanker owners' ideas for rigging the market to cut out capacity. The latest indications from Intertanko about its lay-up pool idea suggest that it has promises of 16m. dwt of vessels, almost entirely from Scandinavians. Its object is now to bring in the Greeks and then start setting floor prices for, say, 250,000 tonners of Worldscale 28—about eight points above present levels—a measure of desperation in a desperate year.

I.H.

Tilbury handles the Thames

ION in Britain's ds has been accom- a transformation in ndling techniques . The new dock- London, islands of activity amid pre- less hinterland, are es of rejuvenation, miles from the old ctivity.

fer of Empire links partners in Europe ieart of the trans- The clamour of ity as far upstream bridging point in London has been re- ie efficient whirr of tainer cranes down- Tilbury. Here the 15 years ago would e his 1978 counter- are far fewer men, oserve, but it would sive machines that by their size and

London's docks em- 0. Last year the lummeted to 8,500, 00 are employed by London Authority, e modern Tilbury nd cargo-handling

the most obvious quence arising from in Britain's trading d from technical argo-handling tech- e Port of London justifiably proud participated in this l surgery without compulsory sever- must pay tribute operation of the l Mr. Noel Ordman, rector of planning ing for the Port of thority. He ex- while the reduc- ing levels had been ler, there had been unrest and that the adapting to the the method and ork was beginning

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of these social up- changing nature of seaborne trade re and sudden. For e has been a steady tonnage of cargo pite major mechani- ts like Tilbury. hen Britain had an with the European rket, but was not ember, the country 30.4m. tonnes of the EEC. Of this es were handled don. By 1976 the total British seaborne trade exchanged with the EEC had risen to 64.5m. tonnes, while the share of this handled through London had fallen to 6.8m. tonnes.

Officials at the Port of London Authority explain the reduction as a result of technical changes in the way freight is handled and shipped across the Channel. Approximately 80 per cent. of trade between Britain and the EEC is carried in containers. London has admirable facilities for handling containers, with Tilbury now one of the leading handling and transhipment centres in Europe.

The problem for London has been that while it has the facilities to handle millions of tonnes of container traffic each year, 60 per cent. of the container traffic bound between Britain and the EEC is carried on roll-on/roll-off ferries. This is by far the biggest factor in contributing to the fall in the proportion of British trade with the EEC which is handled through London.

The roll-on/roll-off ferries constitute a new mode of transport which has grown to dominate Anglo-European trade during the past decade. Its main advantage over other forms of container shipping is that it can give road haulage companies trading between British and European manufacturers a 24-hour maximum sea passage time. This effectively rules London out of the race, in favour of Dover and the other Channel ports.

These can offer virtually instant travel for a container full of exports. This appeals to the road haulier and his manufacturing industry customer and it appeals to the Channel ports which are excused the expense of investing heavily in container handling equipment, for the container remains on its truck aboard the ro-ro ferry.

This circumstance of geography may have robbed London of much lucrative European trade, but London itself has undeniable advantages for long-distance freight destined for the four corners of the world and the regions of Britain.

London and its river has one of the most enviable hinterlands in Britain for servicing long-distance freight transport. There is an efficient motorway network within 20 miles of the river at Tilbury. This, the deep-water facilities in the Thames estuary and the major market of London, encouraged world shipping lines to enter a fruitful relationship with the Port of London Authority, resulting in the formation of the highly mechanised £60m. container port of Tilbury, now expanding on 1,037 acres. Of this, 114 are devoted to container handling berths, 80 acres to forest product handling berths, 15 acres to a bulk grain terminal and, emphasising the relatively low priority given to ro-ro freight, "only" five acres for ro-ro terminals.

Shift

The rest is either water, for future expansion, or general cargo, the small area for the latter again underlining the shift from old London's trading activities as a warehouse for the world to a highly specialised centre for handling bulk goods on the long-distance routes.

This change has been described as a revolution, based on a major programme of mechanisation. Containerisation is the biggest change, pioneered largely by the shipping companies rather than the ports. Next is the move to ever larger ships, up to one million tonnes drawing 95 feet of water. Even bulk cargo ships are now up to 250,000 tonnes deadweight.

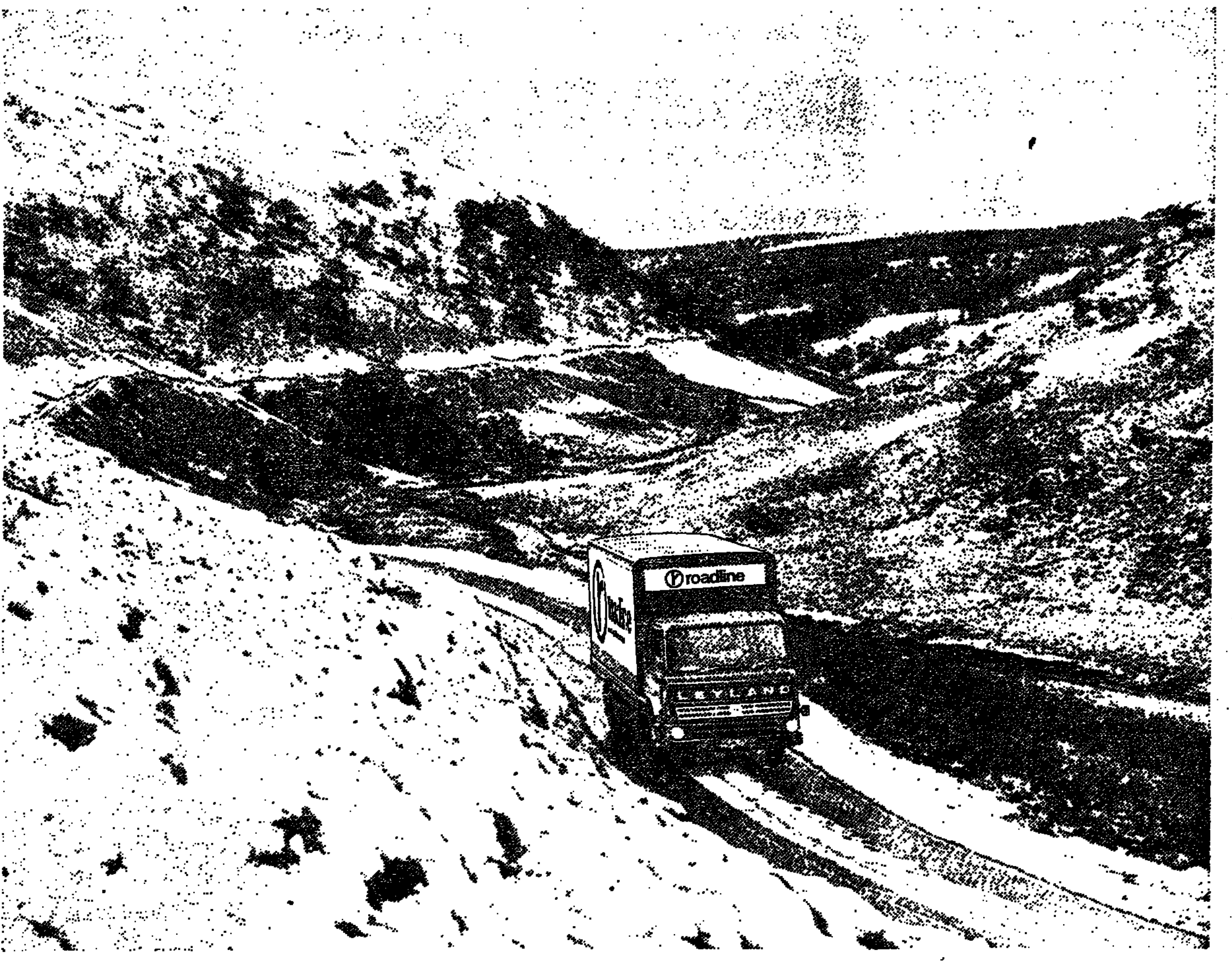
An idea of the changes in efficiency as a result of this mechanisation are clear from the performance of Tilbury. This can handle ten times as much cargo as a conventional port terminal, with one-sixth of the men. On the debit side, it occupies ten times as much land and costs six times as much as a more conventional port.

During its heyday, London's old port and riverside wharves handled at most 100,000 tonnes of cargo a year. Tilbury can handle 1m. tonnes a year. This makes it the heaviest worked container berth in Britain.

The changes have resulted in simplification and rationalisation of port layout. In the 1950s, for example, 24 timber berths and a landing dock handled 600,000 tonnes of wood a year. Now four highly mechanised terminals can hadle 1.3m. tonnes.

It is small wonder then that the Port of London Authority describes the structural changes over the past decade as involving "ferocious economics," which would not have been possible but for the support of shipping lines. The £35m. new terminal to be opened at Tilbury this September, for example, will have been built with £15m. contribution from shipping lines with the PLA footing the rest of the bill.

Lynton McLain



Policy decisions for British Rail

FOR BRITISH Rail's freight business, the big event of last year was unquestionably the decision to return to railways ownership the Freightliners container transport company founded by British Rail but *controlled since 1969 by the* National Freight Corporation.

This was the climax to a year which was kind to rail freight in terms of Government policy but during which the deepening recession in the steel industry once again threw British Rail's planning into error and instead of the budgeted increase in traffic, total freight carryings fell from 176m. tonnes in 1976 to 171m. tonnes. Final financial results for the year have yet to be released, but there is every indication that they will show a deficit of around half last year's £35m.—a commendable improvement given the market circumstances.

Another policy change in the past year which will work in rail freight's favour is the proposed widening of the scope of grants towards the cost of private rail sidings under the terms of Section 8 of the 1974 Railways Act.

The immediate effect of provisions in the Transport Bill now before Parliament to bring into the scope of Section 8 payments towards rolling stock for use in such sidings has, inevitably, been to slow down the flow of applications until the more generous terms are available—*probably by this autumn.* But it has also been encouraging for British Rail to see that even within the more restrictive interpretation of section 8, a number of substantial grants have been made on broad grounds of improving rail facilities in the interests of keeping heavy loads off the road, rather than for new sidings.

The best example here was probably a £137,500 grant to Freightliners to meet part of the cost of relaying worn out crane tracks at its Stratford terminal, although under railways ownership Freightliners will be out of scope for such aid. The record so far is that section 8 grants, on which there is no overall maximum limit, have involved payments of £6.8m. and produced an additional 5m. tons of rail freight.

There have also been encouraging developments for rail freight in recent months from the EEC, which finally pushed Britain into accepting the shorter eight-hour driving day for lorry and bus drivers in a three-year phase-in starting last month. Even in the first stage of implementation, severe restrictions are being placed on long-distance trunking by road with the imposition of a 450 kilometre per day limit unless the lorry carries two drivers or a tachograph—the measuring device which the road transport unions have so far refused to countenance in domestic work. As the rest of the provisions work through, the costs of trunking by lorry are bound to increase and with the U.K. Government also set on a policy of basing lorry taxation on axle rather than unladen weight, the heaviest lorries are also bound to face further steep rises in vehicle excise duty.

So taken overall, the Government transport policy review *which led to last June's Transport* White Paper has done something to improve the operating and financial climate for rail freight, even if it has not accepted the rail unions' case that there is any sense in forcing traffic from road to rail. It was this latter fact which produced the curious picture of Mr. William Rodgers, the Transport Secretary, getting his roughest public ride of the year from the Labour Party Conference, even though British Rail was far from *displeased with his White* Paper.

Promise

There were, however, two other things said about rail freight in the Transport White Paper. One was a promise of a Government backing for a rolling programme of investment in freight—a device designed to make planning and stockbuilding programmes easier and more efficient to manage, but whose effect is limited in practice as the Government still has to give specific approvals for any capital investment over £2m. The second was a reiteration of the Government's commitment to stop subsidising freight in the form of grants to either British Rail or National Freight.

This means that British Rail has to break even on its freight operations this year and from then on produce sufficient margins to be able to ride the cycle of industrial production even when it turns into the kind of recession Britain has had since 1974. It is a tall order for a business in which over 70 per cent. of volume and 68 per cent. of revenue comes from carrying coal, coke, iron and steel and which carries a high proportion of fixed costs which cannot be eliminated when the economic cycle turns downwards.

Mr. Frank Paterson, British Rail's chief freight manager, believes the target will be met this year, although he acknowledges that within the business there is still a fair amount of cross-subsidisation from profitable to unprofitable sectors.

He is budgeting to increase freight volume by 1.5 per cent. a year, moving to 185m. tonnes in 1983—certainly not an over-ambitious goal given that the railways carried 197m. tonnes *in 1973. He says the volume* forecast, which has not been met in the last two years, is based on a detailed and "Presbyterian" study of major customers' plans. Even Presbyterian caution would, however, have looked like gambler's confidence with regard to predictions of steel output in the last two years.

While British Rail is justified in emphasising its dependence upon the performances of other heavy industries and the problems of *running an inflexible,* fixed costs business, there are areas where costs can be cut and operations streamlined.

In some areas, British Rail's record in the past ten years has been good. The number of wagons in the fleet is now 165,000, not much more than a third the number in 1967, and there as been an almost equal drop in the number of locomotives and terminals.

Mr. Paterson speaks of "a quiet revolution" in resource utilisation and in managing the switch from predominantly wagon-load business (69 per cent. of total in 1968) to train-load (79 per cent. of total in 1976). But even with dramatic changes like these, the un*certainty persists as to whether* rail freight has moved fast enough to combat the savage competition of the lorry and whether it has been able to take sufficient advantage of an unparalleled restraint in costs during the past three years as a result of Government pay policy. Labour expenses amount to 65 per cent. of rail freight's total costs and 40 per cent. of its direct costs (that is, costs specifically attributable to freight rather than in supporting the railway infrastructure as a whole).

Total staffing levels within British Rail have fallen steadily since 1974, but the target of 8,000 fewer jobs in 1977 has been missed by almost half as the National Union of Railwaymen has withdrawn co-operation on de-manning, because it says its members are being called upon to do too much overtime and rest-day working. It may be that a renewed push can be given to the de-manning programme in the context of the present round of bargaining on productivity bonuses, but British Rail still seems to be some way *from agreeing with its unions* an industry-wide formula for the measure and reward of productivity improvements.

Less significant in terms of the number of men involved but of considerable psycho*logical importance for the rail*ways manpower strategy is the continued running battle over proper levels of footplate manning. The drivers' union, ASLEF, has now switched its campaign on this issue from the High Speed Passenger Train to the new generation of freight locomotives, the Class 56. This matter, on which the Government would not risk a confrontation in the early winter, is also on the agenda for the present *pay* talks.

Even the restructuring of the rail wagon fleet still has a long way *to go. Given that the aver*age resource utilisation of rail freight's competitor, the heavy lorry, is probably between 0.5 and one loaded journeys per day, there is still no room for complacency in BR's wagon utilisation figures. This works out at 0.5 loaded journeys per day for the most heavily utilised merry-go-round coal wagons (the target is a 40 per cent. improvement): 0.75 loaded journeys per day for parcels wagons and 0.66 per day for *Freightliner wagons. At the* other extreme, the 1,300 brakeless pipe wagons manage only one round trip per 28 days. Open goods wagons make one round trip in 17 days and the core of vacuum braked vans one round trip per 14 days.

This backlog of problems from the past is a substantial handicap in *British Rail's* attempt to produce a comprehensive rail strategy. It combined with problems of the present, such as the difficulty of arriving at a sensible rationalisation plan for its heavily loss-making door-to-door parcels service because of lack of Government interest in the problem of over-provision of facilities elsewhere in the state-owned parcels sector. Then would also be resistance by *unions to the loss of jobs which* would be involved in such a rationalisation.

Facilities

It is possible also that the return of Freightliners will at first cause rather than solve problems. The biggest worry is that the company, which was in a ragged condition when National Freight took it over, has not been given the investment in terminal facilities *needed to meet the almost* trebling in volume of business in the past decade because of the cash-flow problems which have bedevilled NFC since its formation.

The outcome is that the company, now once more in the limbo of an ownership change, does not know whether it will get the *£4m. a year it conser*vatively estimates it needs just to replace worn-out containers, cranes and lorries. British Rail has been given no undertaking so far from the Government that there will be any contribution outside *the existing freight* budget for this purpose and within the break-even constraint it now faces, British Rail simply cannot afford the extra interest burden which would result from borrowing for *investment in Freightliners.*

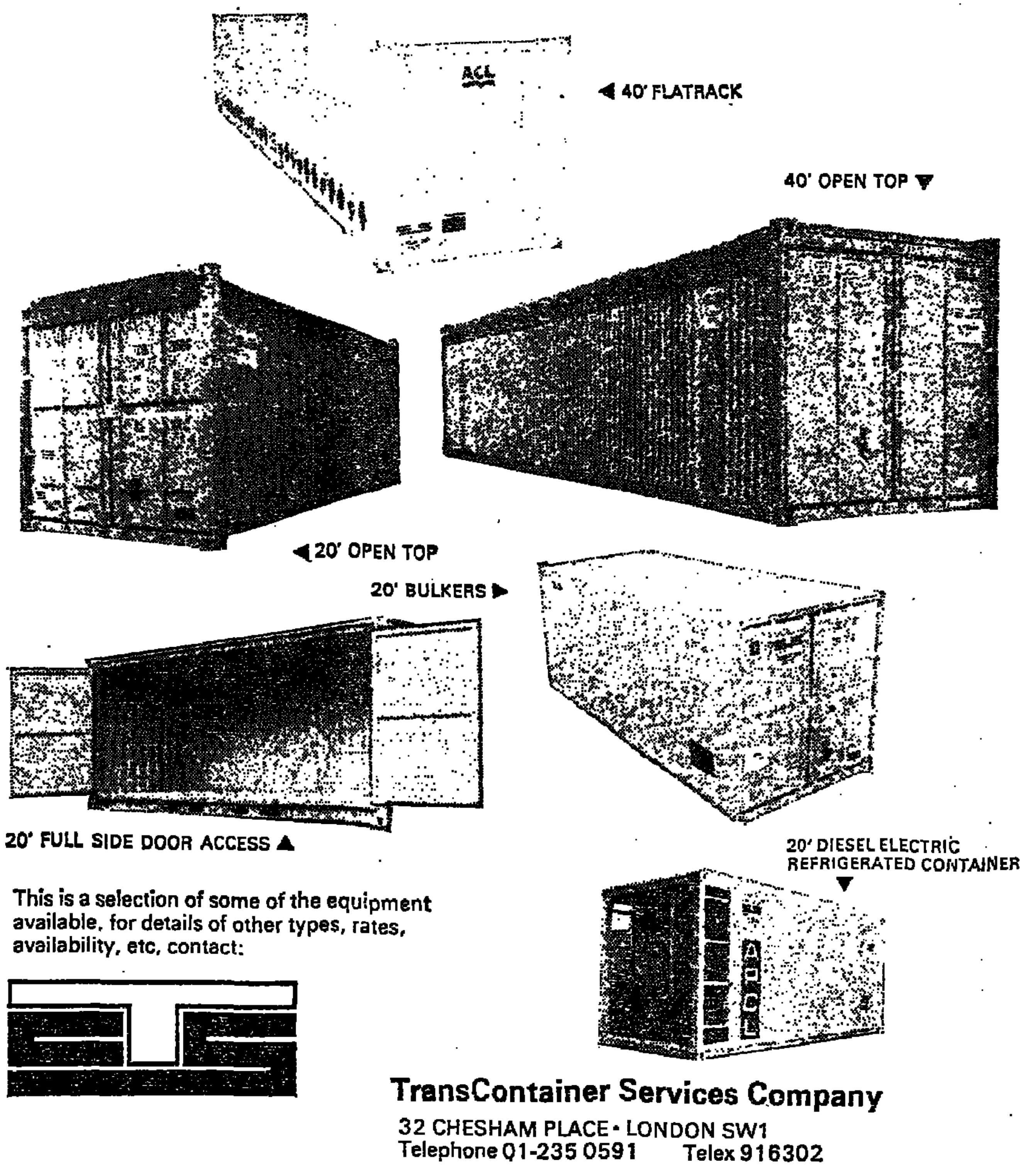
In policy terms too there are doubts about the future of Freightliners. British Rail has publicly guaranteed that it will continue to be run as a separate company—a guarantee which was necessary to quell the alarm expressed by a number of Freightliners' major customers that it would lose operational flexibility, for example in balancing its use of road and rail movements, under British Rail control.

Freightliners is also keen to retain marketing independence—an independence which can only be meaningful if the company is allowed to compete for business with other divisions of rail freight. British Rail has still not expressed a firm view on the marketing question, but par *of its justification for deman* ing the return of the organis tion was the railways' need f a comprehensive marketi strategy, with Freightliners its primary carrier of door door consignments.

It is also useful to remembe that over half of Freightliner business is related to mariti container movements—a situ tion which presents British Ra with the challenge of improvin its long-neglected approach t *export traffic. The appointme* of a European traffic manage at the end of last year is a ste in the right direction, but n one believes that the existin rail-ferry ships, with a maximu capacity of 22 wagons, are rea equipped to compete in th world of modern ro-ro.

The Channel Tunnel remain BR's best hope, albeit a pre remote one at present, of major boost for its Europe business. It is at least encoura ing that BR's planners have a accepted that it would be bett to get the tunnel on the basis existing rail links on this si of the Channel rather th demanding a brand new hig speed link.

Ian Hargreav



Whole train consignments

IN THE past ten years, the biggest single change in the railway freight business has been the uninterrupted swing away from wagon load movements in favour of moving consignments in whole trains.

The logic of this strategy is inescapable, deriving as it does from BR's analysis of the continuous flows of heavy materials which form the bulk *of its ton*nage from the coal and steel industries. A 27-wagon train set linking the British Steel works at Port Talbot and Llanwern, for example, is capable of a payload of 2,025 tonnes—equivalent to 63 of the heaviest lorries permitted on British roads.

Even within the Freightliner business, which is relatively well adapted to deal with smaller and less regular traffic flows, the most profitable kind of business is in contracted out whole trains, such as those which link the deep sea Maritime Terminal at Southampton with the main rail network.

This is secure business which carries only one major disadvantage: that almost all its over*heads are fixed and not easily* reduced during times of economic recession when revenue from the coal and steel industries falls. The only remedy is pricing at a level which would give BR margins large enough to carry it through the trade cycle and although the railways cannot escape blame for pricing policies in the past, they have a powerful argument in terms of the extent to which they have suffered from Government interference in this respect.

But the bulk train load part of rail freight, in spite of its overwhelming importance in terms of both volume and revenue, attracts far less attention than the 20 per cent. of wagon-load operations. This is in part because there is more to criticise in the later department and no doubt partly because it is to the wagonload business that believers in rail freight look for effective competition with the heavy lorry to turn back the trend which has given road haulage almost 70 per cent. of U.K. freight business by ton-mile.

Within British Rail, there appears to be some difference of view about how wise it is to push this road-rail argument—*an argument which is certainly* in poor esteem with Government. But leaving aside the worn conflicts about the extent to which rail and road freight compete on equal terms, it is fair to observe that the real extent of competition lies in the area of the 24 per cent. of U.K. freight carried by heavy lorries on trips greater than 100 miles.

Because this is an area of such intense competition, keen pricing, speed and reliability are critical. Neither of these qualities is offered by the traditional brakeless or vacuum-braked wagon, which is limited to speeds below 40 mph for the most part.

BR now has two weapons in its armoury for this business: its 16,300 air-braked wagons and the Freightliners system now in the process of being transferred back to railways ownership, having been controlled since 1969 by the National Freight Corporation.

The air-brake network will comprise 50 daily (or in most cases nightly) services by the end of this year with running speeds over 70 mph. At the end of last year, the service received, after a good deal of agonising, a new name: Speedlink—a title not long before associated with an experimental idea for re-invigorating small-consignment traffic by a new unloading method at terminals.

This earlier Speedlink was given short shrift by the Railways Board on the grounds of cost, with preference going to the more cautious air-brake wagon network which has been able over the last couple of years to prove each of its routes in turn and where a particular service has not been cost effective to quickly withdraw it. Such attitudes represent a complete transformation from the old concept of the railway as *the uncuttable, almost un*changeable national network of services—a theme which still hampers progress in future planning for rail express parcels.

At the end of 1977, Speedlink had picked up 2.3m. tons of business, of which BR estimates 200,000 would otherwise have gone to road hauliers. It hopes the tonnage will be 4m. by the end of this year and 8m. by 1982 at which point its contribution begins to look significant in more than merely psychological terms. By this time, Speedlink should have a fleet of almost 5,000 wagons.

One obvious consideration now that British Rail is to re-possess Freightliners is the avoidance of wasteful competition between the two. There is certainly a degree of overlap in types of consignment—whisky for export, for instance, goes by both systems—and although such competition is not inherently bad, it raises the pressing question of priorities within a strict capital spending allowance. Speedlink's £67m. capital programme over six to seven years is £51m. more than *Freightliners has received dur*ing its nine years with National Freight.

Ideal

There is a body of opinion which argues that with 98 per cent. of rail freight originating in private sidings and 93 per cent. terminating in private sidings, Speedlink's modern wagons of versatile design provide the ideal system for lorry-load size consignments. The opopsite view is that Freightliners can do anything which Speedlink can do plus being able, through its own heavy road haulage fleet and by using haulage subcontractors, to provide colection and delivery from *those terminals.* The problem with *this* argument is that Freightliners can *only* serve terminals which possess heavy lift cranes, which cost over £1m. each and thus immediately re-open the question of investment *priorities.*

The official British Rail view is that the two services a complementary, with Freig liners having a crucial edge overseas business because of ready-made connections wi deep-sea container shipp and possibly in the future increasing usefulness in tra European container moveme owing to the tightening restr tions on lorry movements with Europe. Speedlink, it says, able to link centres of ind trial production with fast, tim tabled trains which are a to operate smoothly and wi out recourse to the hazards a delays of marshalling yards cause of the efficiency of B *real-time* computer syste TOPS.

In addition to the Freig liner and siding to sidi wagon-load traffic, British R also has a residue of wag load business for which offers, in conjunction wi National Carriers, collecti and delivery by road.

In 1977, this involved 1.8 tonnes of goods, mainly ste products. It accounted for per cent. of the traffic pass through road-connected depo Although customers alrea pay a comparatively high ra for this service, income is st inadequate to meet all the sociated costs, even usi wagons whose value is ful written down. So the policy to gradually price up these se vices and to seek new busine only where it makes co mercial sense—which probab means for hauls of at least 2 miles.

The bulk of the door-to-do services are, of course, parc and in this department Brit Rail's intentions are still from clear. Last June's Tra port White Paper specifica rejected a co-ordinated soluti to losses among the four sta owned parcels carriers, taki the line that it was up to t companies involved to ta pricing action and reduce cos in order to get the business into surplus.

National Carriers has be given some special help wi investment in the Transpo *Bill,* having broken even trading terms *for* the first tim in its history in 1977 and Roa line, another NFC company h returned to trading profit aft losses in 1976. The other publ carrier, the Post Office, is pr jecting a surplus in its parce business in 1978, and Briti Rail has in the last 18 month priced ahead of inflation, resu ing in a loss of general parce *business. Red Star,* the prestig express service by which parce can be *booked* on specific passenger trains, continue however, to expand, indicati how very soundly based th sector is.

So thus far the Governmen strategy seems to be on cours although the continuing overa losses of rail parcels remai one of the many threats to th ability of British Rail to surviv this year without grants to me *losses in its freight business.*

I.H

Containers meet problems

CONTAINERISATION is now established world-wide, and has passed through its honeymoon period. The problems have begun to multiply.

Historically, the concept has been around since the 1930s, when a U.K. Royal Commission on Transport commented that it was a matter of some surprise to its members that the advantages of containers had not be*come obvious to shippers. They* were perhaps obvious, but the hardware was lacking.

The Americans were the first to take the risk. In 1956 an American trucking company began taking cargo by sea in *containers between New York* and Puerto Rico. After a nine-year gestation period, containerisation came to the transatlantic trade when Malcolm McLean's ships carried containers between New York and *Europe. The container revolu*tion had begun.

The effects have been spectacular, as Londoners well know. The complex of Thames docks which began at Tower Bridge and stretched for miles down*river—St. Catherine's, London* Docks, the Royal Group, the East and West Indian docks—have either closed or are running at a fraction of capacity. The high *unemployment* in the East End labour exchanges, and the industrial desolation along the riverside, owe much to the good idea of putting cargo into boxes.

But now the problems are not merely caused by that good idea—they are part of the trade itself. Naturally enough, these problems are inseparable from the general world-wide recession, a recession which has been particularly hard on the shipping industry and continues to be. Equally naturally, the container world has displayed some twists of its own to worry the major shipping lines, whose investment in containers is now immense.

Massive

Containerisation offers enormous economies of scale and of time. It also calls for massive investment, both in the containers themselves and in the infrastructure of the ports. Finally, container ships themselves are multi-million pound investments — the recently-launched Ellerman Harrison *Container Line's City of Durban* came in at around £60m.

So container vessels need the work—and there are increasing signs that they are not getting it. *The City of Durban* is a good case in point. Launched last September from the Bremen yard of A. G. Weser, the 48,000-ton ship is one of the largest container vessels ever built and one of the most sophisticated. It is designed to carry 20-foot containers, many of them refrigerated, stored ten across below decks. A computer monitors the refrigeration and *maintains correct temperatures.*

But it was built for the U.K.-South African trade (hence its size and advanced refrigeration equipment) and that trade is not what it was.

Ten years ago the South African Government ordered a

CONTINUED ON NEXT PAGE

FREIGHT AND TRANSPORT SYSTEMS IX

Rapid growth in air cargo

HOUT the world, the f cargo carried by air sing rapidly. Statistics e International Civil Organisation show that all volume of cargo y the world's scheduled n 1977 rose by 7.6 per 8.4m. tonnes, the bigual increase seen this At the same time all able indices for freight t, covering Britain, European and U.S. and international nd including the acti f the independent confirm that activity ding. One estimate sets h in the U.K. alone at per cent. a year.

set against the com slow recovery of World economies from sion that followed the of late 1973, the ppears to indicate that more shippers and rers are turning to lane as a swift and t means of transport goods.

factors are contribut is growth. One is un the realisation on the nany airline manage a period of slow pas affic growth, that the largely neglected of the business can o yield better returns re than one airline carried through the conomic situation of w years by this timely to cargo.

ove

factor has been the on into service of an number of new wide rcraft, such as the 7F, which make ideal carriers. In addition, cargo handling tech some of the world's ports have helped to he cargo flows. The craft in particular ed a demand for dif pes of bigger contain ed to fit their larger l this in turn has stumulate air freight. ger containers have rwarders to consoli r loads from a wider shippers, creating in handling and speed nts.

the freight side of scheduled air trans try still has a long before cargo is likely large a contribution nes' revenues as the side already does. eakthrough into the use of air cargo faci not yet arrived.

ve it, there will need ral parallel develop he air freight busi is undoubtedly a r acceptance on an al basis of pricing at offer inducements to change their ways g as much as their thods of distributing y customers for air freight still only use it on an ad hoc basis when traditional means of surface transport are blocked by strikes—such as the U.S. ports strike of recent weeks. Far fewer shippers actively use air transport as their sole means of distribution, gearing their production rates to the faster turnover that air transport can provide.

Encouraging the ad hoc users of air freight to abandon attitudes of mind built up over a lifetime will not be easy, but the future growth of air freight depends as much upon this kind of education campaign among shippers as it does on such matters as pricing.

Another factor is the need to develop a much greater number of regularly scheduled all-freight services than is the case to-day over a much wider spectrum of international destinations. On some routes, such as the North Atlantic, some of the present all-cargo Jumbo jet services do well, but there are probably many more routes that are less competitive, but more lucrative, waiting to be exploited by the airlines.

On the ground there is undoubtedly a need for many more automated cargo terminals at major airports, like those at Heathrow, Schipol, and Frankfurt. There are still far too many airports where cargo is still relegated to old, draughty and remote sheds, with inadequate customs facilities, and often almost no facilities for even temporary storage of any kind.

It is significant that this lack of adequate facilities is frequently to be found in the countries of the Third World, where maximum benefit could be derived from a substantial increase in the use of air cargo. But it is not difficult even in Western Europe to find cargo facilities at some airports that match the primitive arrangements found in the less developed world.

A more liberal and understanding attitude on the part of many governments would also do much to help. It is still possible to find some countries where the customs formalities are handled almost as though the incoming cargo aircraft and its crew were trying to perpetrate a crime rather than stimulate valuable business activity. Even where more enlightened attitudes exist, the documentation that is required is tedious and time-consuming, and frequently uncomputerised, requiring considerable physical effort in preparation.

These are some of the extreme elements in the world air transport system that are mitigating against the development of air cargo, but they are sufficient to slow the prospective growth rate unnecessarily. A concerted attack by the air transport industry on these problems, with the assistance of those more enlightened governments of the West who can see the value of such a development, might work wonders. As it is, however, it seems that cargo will continue to develop piecemeal, gaining strength and importance gradually, rather than achieving the swift and revolutionary breakthrough that many believe to be possible.

One breakthrough in the cargo rating structure which may go a long way towards boosting cargo development is the re-introduction by British Airways earlier this year of its low-priced contract-rates structure—a modified version of the scheme which ran for the first six months of 1977. Earlier opposition to the scheme by U.S. airlines and the U.S. Government forced British Airways to suspend the new pricing policy last June, after it had boosted business by 30 per cent. But by modifying the scheme, and submitting it to President Carter, the airline won his acceptance of it, and the over-ruling of the U.S. Civil Aeronautics Board's objections —after some of the major U.S. operators, such as Pan American, Trans World and Seaboard produced their own low-price competitive proposals.

The BA scheme offers significant reductions in rates to agents who are prepared to contract for a minimum shipment of 800 tonnes of cargo a year. Under the scheme, the cheap contract rates are 40p a kilo for containerised freight from London, Glasgow and Manchester to New York, with a 5p discount for off-peak shipments between 1800 hours on Sundays and 1400 hours on Tuesdays. Cheap contract rates are also available to Boston, Chicago, Detroit, Miami, Philadelphia and Washington. The rates are available on BA only from Britain to the U.S., and not vice-versa.

Contracts

The airline said it had devised the idea originally to stimulate trade between the two countries, and to turn unused transatlantic cargo capacity to good use. The majority of the U.K.-based freight forwarders, including some of the biggest in the business, have already signed contracts with BA, and the airline expects further deals to be signed soon. The airline is hopeful that once the success of the contract-rates scheme has proved its value on the North Atlantic, it will spread to many other parts of the world.

In addition to the scheduled airlines, which carry an immense amount of cargo in containers in the holds of regularly scheduled passenger airliners as well as in their own all-cargo aircraft, a large volume of freight to and from Britain is carried by the independent all-cargo operators, of whom the three largest are IAS Cargo Airlines, Tradewinds and Transmeridian.

Of these, the largest is IAS Cargo Airlines, founded by Mr. Alan Stocks in 1966, which now carries over 50,000 tonnes of cargo a year. From a turnover of £215,000 in 1970-71, and only one Britannia aircraft, IAS has expanded rapidly and for 1977-1978 anticipates a turnover of over £32m. and a pre-tax profit of £1m. Its current fleet includes 4 DC-8 freighter jets, three Boeing 707s, two Britannias, one CL-44, and a Hercules freighter.

Tradewinds, founded in 1968, has also developed rapidly in recent years, and now has a fleet of two Boeing 707s, four turboprop CL-44s and a Bell Jet Ranger helicopter. Although still handling some single-entity work on specific contracts, the emphasis at Tradewinds is on split charter work to the Middle East, and to West and Central African markets. Earlier this year, it was announced that the Lonrho group was planning to acquire Tradewinds. New routes include a proposed U.K.-Latin American service and an extension into Far Eastern markets.

Transmeridian was founded by Mr. T. D. (Mike) Keegan over 16 years ago, and also specialised in long-haul cargo work to the Middle East, Far East and Africa. By last year the fleet had grown to eight swing-tail CL-44s, and in 1977 the Transmeridian group moved into jets, with the introduction of two DC-8 freighters.

In mid-1977, it was announced that Cunard Steamship Company, a subsidiary of Trafalgar House, had acquired the entire issued share capital of the Transmeridian Group for £3.37m. At that time it was stated that a pre-tax profit of £1m. for the Transmeridian group for the year was anticipated. Trafalgar House said the deal would complement Cunard's existing sea cargo operations at a time when the world-wide volume of cargo being carried by air was rising rapidly.

Earlier this year the U.K. Civil Aviation Authority announced new regulations for air cargo carried by aircraft operated by British airlines, designed primarily to make life a little easier for the independent operators. Just how these new regulations will work out in practice remains to be seen, but they appear to be a step towards that even greater liberalisation which the air freight market needs world-wide if it is really to achieve the breakthrough nearly everyone engaged in this section of the air transport industry believes to be ultimately achievable.

Michael Donne
Aerospace Correspondent

Containers

CONTINUED FROM PREVIOUS PAGE

report on the future pattern of its sea trade. The report, published two years later, said that the trade should be containerised with all possible speed. There was a long pause while the expense of the move was considered. Then, in 1974, the South African Government and the Europe-South Africa Conference, the regulatory agency which establishes freight rates for the route, signed an agreement to go container by 1978.

But the intervening period has not been kind to the planners. The 5m. tonnes of trade in 1974 has not gone up to 6m. or 7m. as had been forecast. Instead, it is expected to slump to around 3m. by the end of this year. The nine ships commissioned by the conference lines—of which the City of Durban was the first—represented over-capacity.

A lucky accident has reduced that number to eight—but on the present estimated tonnage it is still too many. As the lines replace the 80-odd conventional cargo ships which presently ply the trade, they will find competition for orders increasingly rough.

Commenting on the state of trade in his speech at the City of Durban's launch, Ellerman-Harrison's chairman, Mr. D. F. Martin-Jenkins said: "There is no doubt . . . that since we placed the order there has been, for political reasons, a considerable falling-off in the normal level of trade between Britain, Europe and South Africa. I believe this will be of short duration only, and that the basic strengths of South Africa in natural resources, so many of which are badly needed by the developing world, are bound to move in increasing quantities during the lifetime of the City of Durban.

Mr. Martin-Jenkins' speech was an optimistic gloss upon the situation. The "political reasons" which have caused a fall in the trade have, if anything, become more urgent, and look like continuing to do so.

A second major worry for the established container lines is the rapidly increasing strength of the Soviet Union in container transport. A $27m. plant for the manufacturer of containers in Abakan, Siberia, supplied by the Japanese firm of Kawasaki, is now nearly complete. The plant will have an annual capacity of around 40,000 units, and will make the Soviet Union self-sufficient once it comes on stream later this year. Last year the USSR's first container plant at Odessa was opened, with a capacity of 5,000 units a year.

Already Soviet shipping prices are often considerably beneath those offered by other container lines, not only in the Far East but also on the transatlantic routes. The shipping prices are complemented by similarly low prices being offered on the Trans-Siberian railway.

This rapid plunge into the market by the Soviet Union has, ironically, threatened the growing predominance in the supply of containers by Japan itself. The Japanese container manufacturers see the Abakan plant as a threat not just to their own exports to the Soviet Union, but also to their other large export markets in Singapore, Hong Kong and Nigeria.

Antidote

The Middle East over the past few years has provided something of an antidote to the general gloom. Container trade there has gone through an entirely untypical boom—now beginning to taper off—and Cunard Steam Ships has invested around £25m. in its aptly-named CAMEL line—Cunard Arabian Middle East Line. The £25m. investment will be spent on building up a new Arab road haulage operation linked to an expanded container shipping service to Saudi Arabia.

Elsewhere, and less spectacularly, investment in containerisation still proceeds. At Felixstowe, capacity is being expanded by 60 per cent., with the aid of £2m. investment. The port's throughput has increased steadily from 1967, when container facilities were first installed: the present capacity is just under 250,000 TEU (20-ton equivalent units, the standard small container size) per year. By 1981, the port hopes to be handling around 350,000 TEU annually. Southampton, too, which will handle the South African container trade, has been substantially re-equipped.

However, U.K. ports still lag in the world containerisation league. The latest figures (for 1976), published by *Containerisation International*, shows the top four ports with over 1m. TEU annually to be New York (1,720,000), Kobe (1,245,491), Rotterdam (1,224,725) and Hong Kong (1,029,059).

London comes in 19th place with 317,148, while Southampton stands at 254,077, Felixstowe at 235,084 and Harwich at 151,744. In Europe, the largest TEU growth last year was achieved by Le Havre, Hamburg and Leghorn.

A final note of perspective; it should be remembered that containerisation still has a long way to go. Around 90 per cent. of tonnage is still carried by the conventional cargo ships.

John Lloyd

Major airline plans

THE PATTERN of changes in technology to cope with the airlines' growing air freight activities is revealed dramatically in current plans from British airlines.

The plans may not have an immediate impact on the industries serving the world airlines, as much of the technology required for growth already exists. Instead, the expansion is likely to be handled through growing numbers of existing aircraft pallets, trucks and increasing attention to modifications in older aircraft. More computer equipment, however, is on the way.

Centrepiece of British Caledonian's £1m. cargo equipment programme, announced last autumn, is a £250,000 semi-automatic mechanical handling system which will be fully operational by this autumn. The system will handle freight through specialised storage and transport equipment. The equipment will be used to equip the new cargo centre under construction by the British Airports Authority at Gatwick, and able to handle 150,000 tonnes of cargo each year. The system could be expanded to handle 500,000 tonnes and next year is expected to have a capacity of 200,000 tonnes.

The British Caledonian system will provide a means of moving all cargo, including igloos, pallets and containers in and out of B.Cal's new freight facility, with a minimum of manhandling. The system has been designed and produced by Masters Air Cargo.

In the case of British Airways, the airline is entering a period of major change, when the long-awaited rationalisation of its long-haul and short-haul operations may be accomplished using new and as yet un-named aircraft. The future of the airline's cargo operations, and the rate at which it can be expanded, depends to a large extent on the outcome of these deliberations about new aircraft.

Crucial

Allied to these future multi-million pound purchases of new aircraft is the much more concrete decision for complete computerisation of British Airways' cargo operations by the early 1980s. This scheme, known as BA80, will have a crucial impact on the profitability and efficiency of cargo operations.

Other airlines are known to be working on similar projects, designed to simplify cargo handling paper work, and in some cases to eliminate much of it all together. In most cases of airlines operating out of London's Heathrow airport, the move to a more comprehensive computer-based cargo handling system will be linked with changes in Customs clearance procedure. Her Majesty's Customs and Excise is planning a central computer for all cargo into and out of Heathrow. This is the HMC80 computer project, also destined to go into full operation in the 1980s.

This computer, the British Airways BA80 system and the other airlines' equivalents will interface with the ACP80 'switch' junction. The completed systems have been necessitated by the forthcoming withdrawal of the National Data Processing Centre's LACE computer at Harmondsworth used for processing customs clearance for imports arriving by air. This is now used by all airlines operating into Heathrow Airport—London.

For exports, British Airways now uses its BACCHUS computer at the Heathrow cargo centre. The computer's function of matching consignments to available space on board aircraft will also be transferred to the BA80 central computer.

There is no doubt that these computers will be designed from the outset to handle a vastly greater volume of international air cargo expected in the 1980s.

An idea of the expected increases may be given from figures published by the International Air Transport Authority. Over the period 1976-1981, the growth in world air cargo is expected to increase by an average of 11.6 per cent., a higher rate of growth than for airline passengers.

The most rapid growth is likely to be in the trade between Europe and the South Pacific regions, while there will probably be a continued healthy performance in trade between Europe and central and southern Africa.

Forecast

Moderate growth rates may be expected on the routes across the North Atlantic, with an average annual increase of 8.7 per cent. forecast. A slightly higher rate of growth is expected in eastbound trade from the U.S.

In terms of tonnage, Europe dominated by West Africa — was Britain's biggest air cargo export customer, with 8,000 tonnes per month flown out. Next was the African market, dominated by West Africa — a total of 5,300 tonnes a month were exported on average last year. Approximately 4,400 tonnes a month went to the Middle East from Britain, making it the third most important air cargo market, followed by the U.S. which received 3,300 tonnes a month. The Far East received 1,400 tonnes a month and Canada and Australia each took below 1,400 tonnes.

To cope with this current and anticipated demand, British Airways is investing steadily in ground equipment. Plans already announced call for the spending of £90,000 over the next year, on 99 new complete igloo-shaped type 149 cargo packages. These are shaped to fit snugly inside the fuselage profile of a modern jet transport.

With no immediate plans to invest in cargo-only aircraft, most of the other capital spending will be devoted to ancillary freight handling equipment or on modifying existing Boeing 707 aircraft to accept a greater proportion of freight. Work on these is already under way, but involves no new technology.

The uncertainties within BA and other airlines over their pressing needs for replacement aircraft for an introduction into service in the middle to late 1980s has to an extent hindered long-term planning. The airline would like to take a closer look at a purpose-designed combined freight/passenger aircraft. But a decision on this must await the other and more urgent problem of finalising a decision on its new passenger aircraft fleet.

Ideally the airline would like to go ahead with the purchase of derivatives of the British Aerospace BAC 1-11, the Boeing 727, or the latest Douglas DC-9 in response to its most immediate need. In the medium-term it firmly believes it will purchase a wide-bodied aircraft, possibly from a European consortium, for use on short-haul European routes.

The choice of a wide-bodied aircraft on the short-haul flights to Europe in place of the existing narrow-bodied Tridents will open up even further the field of air cargo equipment. Most of this will be conventional, igloo pattern "universal loading devices," but will provide valued work for the equipment makers into the 1980s.

L.McL.

A British Caledonian Airways Boeing 707 freighter at Houston Intercontinental Airport. The airline recently introduced a weekly Texacargo service between London and Houston, Texas.

The future for rail

RAILWAYS MAY be a declining industry in Britain and North America. The French, West German, and Japanese Governments may all be talking of cutting back on the growing bill for financial support of their rail systems. But in the world as a whole railways are a boom business.

In the 1950s and 1960s the total volume of freight, in terms of ton-miles, moved by the world's railways grew by about 4-5 per cent. a year, a rate which means that the total business being done doubled within 20 years. The rate of increase may have fallen in Western Europe and North America in the last few years of recession. But elsewhere—in Asia, the Soviet Union, Africa, the Middle East, and parts of Latin America—freight traffic has continued to grow.

It is a business, too, in which large sums are being invested in many parts of the world. According to estimates compiled by the International Railway Journal, around $U.S.8bn. is likely to be spent on new track or equipment this year by 46 of the world's railway administrations; and this figure does not take into account the sums which will be invested by some of the biggest railway systems such as those in the U.S. and the USSR.

Of this sum, about $U.S.0.6bn. will be going on new freight cars and some $U.S.3bn. will be spent on new or improved track, signalling, and electrification schemes. In Latin America, the Middle East, parts of Asia and Eastern Europe new routes are being laid specifically to carry freight. In the developing countries railways are seen as having a major role to play in the creation of a new or stronger industrial base. Road based freight distribution systems are being improved too. But where the distances are long, the loads to be carried are heavy, and the flows of traffic are likely to be substantial, then there is a place for railway construction and modernisation.

Longer

In the industrialised countries, where railways were established a century or more ago, money is being spent to improve freight handling systems. In the U.S. and the USSR where distances are long, in West Germany and France where average rail hauls are a good deal longer than in this country and where a very high proportion of rail traffic moves to or from (or both) private rail sidings, and in similar circumstances elsewhere, the advantages of rail in moving thick regular flows of traffic come into their own. Improvements in track, signalling, rolling stock, and motive power and the adoption of automatic data processing techniques for controlling freight and freight wagon movement—such as TOPS in Britain and GCTM in France—are raising the speed and reliability of full train load traffic and are helping to rationalise what in Britain is called wagon load traffic.

As one would expect, geography sees that rail freight is more dominant in inland transport than in international freight movement. But it is a much more dominant inland carrier in the world at large than might be generally assumed in Britain where rail's share of the market has been falling steadily over the years. According to a recent study by the Transport and Road Research Laboratory, probably about 70 per cent. of all inland freight movements—as measured in ton-miles—in the world is by rail. This figure may be boosted by the very large quantities of freight which are moved by rail in the USSR —some 3,700m. ton-kilometres a year or about half the world total—and in North Ameri which accounts for a furth quarter of the world total, in every other continent, ag from Western Europe and So America, rail still carries mo freight than road transport.

Nonetheless, rail remains major international freight ca rier betwen countries with co tiguous land frontiers, such in Western Europe and La America (where a new agre ment has recently been sign to simplify cross-frontier freight procedures). In bo France and West Germany, f example, more internation freight traffic goes by rail th by either inland waterway road.

Saving

The containerisation of t world's main dry cargo rout in the last ten years has al given rail freight systems major role. In Britain, for ample, maritime container tr fic has been the saving of t Freightliner concept. Of the 9 tonnes a year of containeris cargo Freightliners is now car ing, something like two-thir stems from the maritime co tainer trade. On the Contin container traffic is also a maj rail business, and increasin so. In France, for examp special container services a run between Le Havre and Ma seilles, the two major contain ports, and the principal eco omic centres in the count Similarly, they run from Rott dam and Antwerp to desti tions in the Low Countries, G many, Switzerland, and Italy.

The services offered by t cross-Channel train ferries a also being much improved. F years while the Channel Tunn project remained alive Brit Rail concentrated upon develo ing its Harwich-Zeebrugge co tainer ship service. A r tunnel across to the Contine would have transformed t freight services rail could off but this prospect has now, al disappeared (for the time bei at least). Meanwhile, the ope ing of the new ferry termi at Gravelines, to the west Dunkirk, has shortened t crossing from Dover to hours, which allows six tr to be made each day. T capacity available here and the Harwich-Zeebrugge run m be small compared with t roll-on roll-off alternative. B there is space to spare and mo could be provided.

Further afield, more ne possibilities are being open up. One of the more spectacul has been the Siberian "la bridge" to Japan. Since t early 1970s this route has bu up its share of Japan-Euro freight movements to about per cent. Now Japanese co panies have signed an agre ment with the Russians supervise the assembly of t equipment they have deliver for what will be the worl largest container manufactur plant. The capacity of th plant—some 40,000 units a ye —together with the 5,000 uni a year being produced another plant completed la year by the West Germans w turn Russia from a net impor to a net exporter of containe These containers are expect to be compatible with E standards.

Other agreements have bee made or are being discusse with Japanese companies f equipping of new container te minals and the operation container traffic across t Siberian route. Given t Russian practice of quoti exceedingly low prices for s transport by Russian ships a similarly low prices for ra transport across the USSR, t Siberian land bridge is like to become an even greater co petitive force for Wester Europe-Far East freight.

C

France's election: a case of Catch 22

By ROBERT MAUTHNER, Paris Correspondent

H VOTERS may be for having a good hen they switch on their this morning and hear ie campaign for the Election on March 12 officially opened to-day. ather like blowing the for the start of extra ter a seemingly endless uring which both sides it more effort into kick- ir team-mates and put- ball into their own net ating the opposition.

ore than two years now, nused French people tched this strange spec- ith growing irritation wilderment while con- to be fascinated by the antics of the players. times, the public has symptoms of severe indigestion, its interest ys been revived in the the knowledge that the ing election could well a turning-point in post-war history.

takes are much higher a British General Elec- spite of all their lifferences, the British tive and Labour parties wedded to a mixed and the preservation e free enterprise sector. ce, however, the voters d with a fundamental between a basically *capitalist society and a* system in which the uld play a much greater n under any existing mocratic regime in Though the Socialists munists are still deeply over many aspects of nmon programme, they agree on the principle country's nine major l groups and the whole and financial sector e nationalised.

eryone's surprise, the nents between the three parties of the Left which led to the dramatic breakdown of the negotiations on the revision of their 1972 programme last September only briefly affected their support in the country. This has been growing steadily since the presidential election in 1974, when M. Giscard d'Estaing narrowly defeated M. Francois Mitterrand, the Socialist leader and joint candidate of the Left, by only slightly more than 1 percentage point.

It can only be assumed that, after 20 years of conservative rule, the swing of the political pendulum has been so fundamental that Left-wing voting intentions have become much more firmly rooted. Clearly, too, the frequent and virulent *quarrels* between the *Gaullists* and the other government coalition parties were not calculated to woo away even very discontented supporters of the Left.

Whatever the reasons, the latest French Institute of Public Opinion poll indicates that *the Left now stands a very good* chance of winning the election if it can master its self-destructive proclivities. Some 52 per cent. of the electorate currently intends to vote for the three parties of the Left in the first round, compared with only 44 per cent. for the combined government parties—the Gaullist RPR, the Giscardian Parti Republicain and diverse Centrist groups.

Yet, because of the complications of the two-round voting system in France and the unpredictable behaviour of the Communist party, the Left could still throw away the victory which is now within its grasp.

The French voting system has been tailored to fit the Gallic temperament. People can vote with their hearts in the first round, knowing that the results will not be final and that they can change their minds in the run-off a week later if they feel they have been too boisterous *for the good of the country.*

In theory, any candidates who have stood in the first ballot and who have obtained at least 12.5 per cent of the registered vote, can run again in the second round. But in practice, the two main opposing camps have in most cases closed their internal ranks and have made arrangements under which candidates stand down in favour of their leading allies. Thus, the second round has in the recent past turned into a straight duel between the Right and the Left in the majority of constituencies.

This "Republican discipline," as it is called in France, will be respected by all the Government parties who, in spite of all their disagreements, have realised that their only salvation lies in unity before the vital run-off takes place. The big question mark hanging over the election is whether the parties of the Left will be able to conclude a similar electoral pact.

M. Mitterrand has already given a firm unilateral undertaking that his party's candidates will withdraw in all constituencies in which the Communists emerge as the leading flag-bearers of the Left in the first round. But M. Georges Marchais, who is currently entertaining the country with one of the most breath-taking tight-rope acts of his long, acrobatic career, has posed so many conditions for his co-operation with the Socialists and Left-wing Radicals, that the final outcome of the election still remains in doubt.

It is not too much to say that M. Marchais has suspended a sword of Damocles over the election and the future of the country. The public opinion polls are an eloquent illustration of how the Communists' attitude can influence the outcome. According to the same IFOP poll quoted earlier, the parties of the erstwhile Union of the Left will win 253 parliamentary seats against the government coalition's 220 if there is a single candidate of the Left in the second round. This would give them an absolute majority of some seven seats in the 491-member National Assembly and perhaps a little more if extreme Left-wing members are included.

But if the Communists do not withdraw in favour of leading Socialist candidates in the second round, the result would be completely reversed, with the government parties winning 261 seats and the Left only 212. Because of the impossibility of calculating accurately the way people will switch their votes in the run-off, the findings of this poll are necessarily subject to a great deal of caution. They do, however, give a general indication of the Communists' capacity to swing the election.

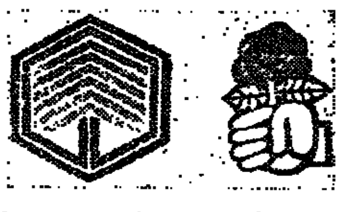
The reasons for M. Marchais's attitude, which remained shrouded in mystery at the time of the breakdown of the negotiations on the updating of the common programme of the Left, have become clearer with the passing of time. The original theory, that he engineered the collapse of the Union of the Left under pressure from Moscow, because of the Kremlin's distaste for Euro-communism and its purported preference for dealing with Right-wing governments in France which have always put a premium on good relations with the Soviet Union, has never been entirely credible.

Ever since the 22nd Congress of the French Communist Party in February 1976, at which the Communists shed their Stalinist mantle and adopted an aggressively nationalistic line, they have given every sign of being as independent of Moscow as the Italian Communist Party. They have not hesitated to criticise the Russians on frequent occasions for their treatment of dissidents and, during Mr. Leonid Brezhnev's last visit to France in June 1977, the Soviet leader did not even make an attempt to see M. Marchais. As far as can be established, the *relations between Moscow and* the French Communist Party are no better than cool.

M. Marchais's biggest worry *is that his party should not, by* associating itself with the Socialists, be drowned in some kind of amorphous social democracy which would undermine the foundations of its support in the country. He has already seen his party supplanted as the leading representative of the Left by the Socialists. Never, during the 10 *parliamentary* elections between 1945 and 1973, did the Communist poll fewer votes than the Socialists. But to-day, the public opinion polls give the Socialists some 28 per cent. of the total vote in the first round compared with the Communists' 20 to 21 per cent.

All the squabbling between the Socialists and Communists over the extent of their nationalisation programme, the costing of their economic and social policies and nuclear defence can be explained by the Communist leader's desire to nail the Socialists to the mast before it is too late. After the election, with the Socialists in a dominant and confident position, the Communists will find it infinitely more difficult to push their policies through against Socialist opposition.

Unfortunately for M. Marchais, things have not worked out as he thought they would. He believed that the tough demands made by the Communists during last autumn's negotiations on the revision of the common programme *would persuade Left-*wing voters that the Communist party was the only genuine representative of the Left and would boost its support in the first round of the election to well over 21 per cent. of the total vote. This would have put the Communists in a strong negotiating position when it came down to drawing up their common programme, which M. Marchais has proposed should take place between the two rounds of voting.



In fact, it is the Socialists, looked upon by many moderate supporters of the Left as a guarantee against the application of extreme policies, who have benefited from the breakdown of their alliance. The Communists, according to the polls, may not even match their score of 21.3 per cent. in the first round of the last General Election in 1973.

M. Marchais thus finds himself in a Catch 22 situation. He constantly proclaims that the Communists intend to join a government of the Left and expect to be given at least seven ministerial portfolios. But at the same time, he continues to emphasise that the Communists will participate in the government only on the condition that an agreement on a common government programme is reached before the vital run-off.

Faced with an incessant barrage of criticism and insults from the Communists, M. Mitterrand has never lost his cool. Though he knows only too well that he is taking a calculated risk, he appears to be convinced that the Communists will at least agree to an electoral pact after the first round if only for fear of being held responsible of provoking the defeat of the Left. And he has steadfastly refused to renegotiate the common programme until after the election is over.

The least that can be said is that the prospects for France after the election are not very bright. If, as M. Mitterand believes, the Communists will in the end agree to an electoral pact with the Socialists and thus ensure the victory of the Left, a government programme will still have to be worked out. Even the most committed Socialists and Communists currently find it difficult to believe that such an agreement can be reached between their parties after all that has been said. "Just look around Europe." M. Marchais thundered at a mass Communist rally a few days ago. "The Socialist governments of Schmidt, Callaghan and Soares have allowed big business to remain in command."

And even on the improbable assumption that the parties of the Left are able to agree on a programme, the country is likely to be faced with a serious constitutional crisis resulting from a permanent conflict between President Giscard d'Estaing and a hostile government and parliament. The President, it is true, can dissolve the National Assembly at any time he likes after a general election, though he cannot take such a step more than once within a year. Should the Left again win a majority at the ensuing election, *the President can only knuckle* under, which would be contrary to all the traditions of the Fifth Republic, or resign.

If, as is still possible providing the Communists lend a helping hand, the government coalition wins the election, the country's economic problems will certainly be much smaller. Any new government of the Centre-Right can be expected to pursue the economic stabilisation policies of the present Prime Minister, M. Raymond Barre, though they will doubtless be applied less rigorously.

On the other hand, the main trade unions, who have been remarkably restrained in recent weeks in order not to prejudice the electoral chances of the Left, can be relied upon to unleash all their vindictive fury on a new conservative government. Nor would President Giscard find it any easier to deal with the political situation than he has since his election in 1974, since the Gaullists, his constant critics inside the present coalition, are again expected to emerge as the biggest parliamentary group on the Government side.

It has often been said that the most difficult task in the world is that of being the President of the United States. After the French general election M. Giscard d'Estaing may well be running President Jimmy Carter very close in the unenviable job stakes.

Letters to the Editor

d prices losion

V. Bradley.

e are housebuilders and 'ronted with massive in the price of build- which is beginning to is of the boom condi- 1972—when too much is made available for iase.

iple remedy would be Government to issue a to banks and institu- it they were not to oans for the purchase -thereby forcing those s and individuals to use resources in acquiring ch a directive need not ilders from using this collateral for building

uild result in building ing up land as their permitted, thereby ply reducing the funds for land purchase at hich is bound to have d downward effect on s. Land would then be l to those who have a *need and the specu-* d be by-passed.

egoing can be equally the commercial and sectors whether for rent or owner- is. High land values e harmful in the long

Bradley.
lare Estates.
ouse, High Street,
Surrey.

adroit tions

T. Wymer.

his letter (February is the "black list" and int sanctions, Mr. J. H. gently states. "If cer- anies operate at a level icy that enables them newhat more than the le at the same time the most competitive then I would have *is was entirely whole-*

port currently issued. ith London conference Firms in the Inner at Lambeth during 1977, at which the Harold Lever was prin- iker, records "A fur- stion related to the of getting sufficient d it was suggested that it levels of unemploy- l social security pay- re a disincentive to find work. Mr. Lever *ie answer to this prob-* ot in reducing the pay- de to the unemployed ising the standards of for those in work."

now, when and how, ?

ner,
Dickinson.
Chemical Works,
proach, Deptford, S.E.8.

to-date elines

L. Kent.

recent months and February 16, there has nendous concern over supply in relation to lines stipulated by the during its visit to Lon- vember 1976.

like to draw attention agaries of agreements forecasts made fifteen artier, especially after predictable events that irred since then. *I ask* the question "Are those guidelines significant to-day?".

If we are to be monitored by Dr. Witteveen's team, the Government should at least extend another invitation to the IMF in order that more up-to-date guidelines are established and based on the current state of the economy. Perhaps, in doing so, the monthly money supply consternation and the inherent, undesirable volatility in the financial markets—where judgments are being made on facts superseded by events—could be avoided.

L. J. Kent.
36, Ringstead Road,
Sutton, Surrey.

London's docks

From the Leader, Greater London Council.

Sir,—David Wright (February 15) covered the current state of play in the redevelopment of London's dockland very fairly, but I think one or two things need emphasising.

What can you do with a Government which *promises all* possible assistance but stops short of actual help? For every step the Department of the Environment takes forward—and there have not been many—the Treasury takes two back. Thus we have been lumbered with a refusal to let Greater London Council back the Trammell Crow development at Surrey Docks; and it seems that Government will decide whether to lend its own support to the scheme solely on its individual and short-term profitability.

This is patent nonsense. This development is crucial to the whole strategy, not least as an act of faith. Do we judge whether or not to build roads, houses, schools and hospitals solely on whether they make a short-term profit? It is not even as if the Government is being asked for money right now—all that is needed is loan guarantee. This makes it all the more infuriating that the development, rightly hailed as the catalyst for the whole scheme, should be held up or endangered.

Meanwhile the GLC and the boroughs have recognised the urgent needs of docklands by rejigging the machinery. I imply no disrespect to the present docklands team, who have done a magnificent job, when I say that the time has come to change the emphasis. So far we have been in the planning stage: now we need to get on with the physical work. To do this the team needs to be commercially oriented, for such social questions as need to be decided in docklands can now be left to the politicians and local people.

Soon we will have both the plans and the team complete; we have already made budgetary provision, as David Wright says, for a whole range of infrastructure projects, including the extension of the Jubilee Line; and we have never lacked determination. All we need, I repeat, is help from the Government, even if that amounts only to letting us get on with the job unhindered, which we are more than willing to do.

Horace Cutler.
County Hall, S.E.1.

Funds and farms

From the Managing Director, Fountain Farming

Sir,—Mr. N. C. McLeod (February 15) comments upon *pension fund investment in agri*cultural land and family farms.

I wonder if it is reasonable to ask Mr. McLeod what exactly he means by "family farms." Is he using the European definition where "the family" supplies all the labour as well as the capital; or more possibly he may be using the American one where "the family" supplies the capital but the labour may well be paid employees?

In the former case, I wonder what possible reason he can supply to suggest that family farms produce a greater output than others. If the latter description is intended then I fail to see any possible way in which they should produce more than any other comparably managed farms.

Mr. McLeod has also missed one vital factor in pension fund investment. A major portion of their purchases is from owner-occupiers on a "sale and lease-back" basis. This provides much needed extra capital investment into agriculture for who else to-day other than the institutions can have the slightest interest in purchasing tenanted farms?

The Act in November 1976, purportedly backed by the National Farmers' Union, giving *effective perpetual security of* tenure to farm tenants, will prove to be one of the most misguided and harmful legislative acts that the farming industry has ever had to bear. The sad part is that one cannot find a single progressive tenant farmer who thinks it is in any way good for the industry. This Act, together with equally harmful tax discrimination against landowners, when compared with owner occupiers, has signalled the beginning of the end of the landlord/tenant system which has been the historic reason for the success of British agriculture.

Let us hope that a new Government has the courage both to rescind this Act and give the landowner parity with the owner-occupier as far as both revenue and capital taxation is concerned.

Anthony Rosen.
Moor Hatches,
West Amesbury,
Salisbury, Wilts.

The labour market

From the Prospective Parliamentary Candidate, East Surrey Liberal Association

Sir,—Like most opponents of incomes policies, Mr. Samuel Brittan (February 13) ignores the fact that the labour market is already controlled by the "exercise of a great deal of monopolistic and coercive power," and it is because of this that *some form of* Government intervention is essential.

The method chosen by the present Government may not be the most desirable, but surely it is better that control should be wielded by the representatives of the people, however inadequately elected, rather than by the brute use of non-elected monopoly power.

(Mrs.) S. Liddell.
Dormans Corner,
Lingfield, Surrey.

Sorting out the standards

From Professor E. Lowe

Sir,—It is surely misguided to suppose as Mr. C. W. Foreman appears to (Sorting out your standards, February 8) that accounting standards can be a cure for both the welter of "misinformation" that is released into society by the accountancy profession and for its present low status and credibility *as a profession.*

In my opinion the basic problem rests with the profession's inability to take itself seriously. Aspects of the problem are suggested in the following kinds of observations.

Although accounting has been taught within most U.K. Universities for some decades now, it is still mainly as an "adjunct subject to economics" and has not been fully integrated into the mainstream of "social science" teaching, moreover it still seems that most of its teachers and other practitioners alike, do not appreciate the need for a complete re-examination of its methodology (or lack of it!) as a social science.

Teaching still often tends to amount to a more or less sophisticated description of so-called "third-year enlightened criticism" which may well have a "halo effect" of confirming present practice.

Accounting does not even have a "scientific language" with which to describe the problem set to which it is supposed to address itself, and worse still its practitioners do not recognise the need for one.

Obviously all human endeavours require "judgment and opinion" in coming to "a true and fair view" but any discipline, to be described as such, requires a "scientific language and framework of concepts," for the subject through which professional opinions and decisions are mainly derived. By and large accountants seem to have no awareness of this need.

The accountancy profession has in my experience been distinguished by its (unsuccessful) attempt to obtain professional education and its rules *and codes of accountancy prac*tice on the cheap.

E. A. Lowe.
Division of Economic Studies,
University of Sheffield,
Sheffield.

An innovation council

From the Managing Director, Merchant Inventors International.

Sir,—The announcement (February 15) that the Government grant to the Arts Council has been raised for the year 1978-79 by £7.3m. to £49m. highlights the need for the support of individuals in other creative areas such as new product design and innovation.

If, however, one accepts (and many will not) that employment is higher on the nation's list of priorities than entertainment, the Government might reasonably be expected to give some thought to the fact that there are thousands of equally creative individuals whose "forté" lies in the field of product-design and innovation who receive no support of any kind from Government sources.

Unlike the Arts Council grants (which broadly cover losses) successful new products are directly related to employment, profits and export earnings and therefore there appears to be a strong case for an "Innovation Council" with a budget of (say) £5m. to assist equally deserving people in this important creative area.

One of the functions of the "Innovation Council" might be to make annual awards for the "best" products in various categories as a stimulus to innovation with the aim of providing employment so that people could enjoy the entertainment provided by Arts Council grants.

A. S. L. Owensmith.
87 Burgh Heath Road, Epsom,
Surrey.

To-day's Events

GENERAL

Defence White Paper published.

Dr. David Owen, Foreign Secretary, holds talks in London with Rhodesian nationalist leader the Rev. Ndabaningi Sithole.

EEC Finance Ministers meet, Brussels.

Scottish National Party MPs meet in Glasgow to discuss their tactics for third reading of Scotland Bill in House of Commons on Wednesday.

Mr. Alfred Atherton, U.S. Assistant Secretary of State, due to arrive in Jerusalem.

Transport and General Workers' Union tribute to Mr. Jack Jones, its retiring general secretary, Royal Festival Hall, S.E.1. Those attending include the Prime Minister and Mr. Len Murray, *TUC general secretary.*

TUC Finance and General Purposes Committee meets.

Dr. Joseph Luns, NATO secretary-general, speaks on "The Future of NATO" at European-Atlantic Group meeting, House of *Commons.*

Nominations close for Ilford North by-election (polling day March 2).

Princess Anne attends Farmers' Company dinner, Mansion House, E.C.4.

Mr. Robert Fell, chief executive of the Stock Exchange, and Mr. David LeRoy-Lewis, a former deputy-chairman of the Exchange, begin two-week visit to U.S. to study regulatory procedures in American stock markets.

Rules governing sale of Advance Booking Charter flights *from U.K. to U.S. changed from* to-day. Advance booking period now 30 days instead of 45, but time that can be spent in U.S. with this type of ticket is cut to seven days throughout the year.

Second technical mission from Nippon Steel leaves for China to discuss renovation of inland steelworks.

Sir Peter Vanneck, Lord Mayor of London, receives Sr. Miguel Colas Piquer, Mayor of Reus, Tarragona, at Mansion House, E.C.4.

Furniture Production Exhibition opens, National Exhibition Centre, Birmingham (until February 24.).

Spring Floorcoverings Exhibition opens, Metropole Centre, Brighton (until February 23).

PARLIAMENTARY BUSINESS

*House of Commons: Home Pur*chase Assistance and Housing Corporation Bill, and Employment Subsidies Bill, second readings.

OFFICIAL STATISTICS

Preliminary estimate of gross domestic product based on output data; and turnover of motor trades (4th quarter).

COMPANY MEETINGS

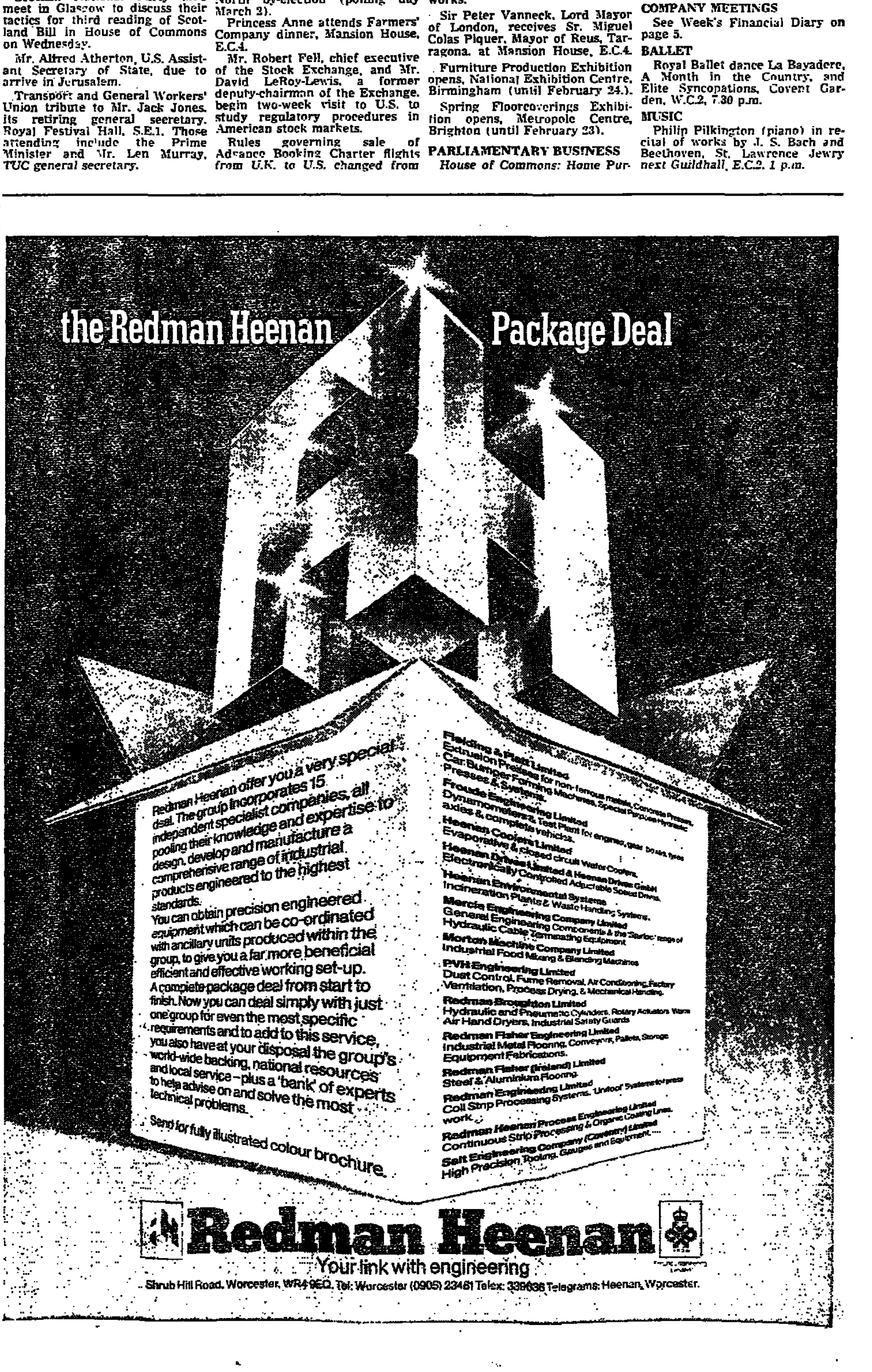
See Week's Financial Diary on page 5.

BALLET

Royal Ballet dance La Bayadere, A Month in the Country, and Elite Syncopations, Covent Garden, W.C.2, 7.30 p.m.

MUSIC

Philip Pilkington (piano) in recital of works by J. S. Bach and Beethoven, St. Lawrence Jewry *next Guildhall, E.C.2, 1 p.m.*



COMPANY NEWS

T. Cowie well placed for more growth

MOTOR distributors and finance company T. Cowie is well placed to continue the progress made over recent years. Mr. Tom Cowie, the chairman, says in his annual report.

Results for the first quarter of the current year are satisfactory and he is hopeful that there will be improved supplies of new vehicles ensuring continued profitability.

Following the unsuccessful offer for Colmore Investments the group has retained a 29.9 per cent. holding which is currently producing a 21 per cent. return. The directors policy of expansion will be maintained with prospective acquisition being constantly explored, Mr. Cowie comments.

As reported on January 18, taxable profits for the year to September 30, 1977, climbed 50 per cent. to £1.4m. on sales ahead at £37.05m. (£25.56m.). The net dividend is raised to 1.7044p (1.526p). At year end net liquid funds were down £1.01m. (up £0.22m.) and bank overdrafts stood at £5.99m. (£5.01m.).

Mercantile Credit Company, a Barclays Bank subsidiary, holds 3.36m. shares.

A 70 per cent. jump in profit to £1.05m. by the motor division was attributed to improvement in profitability of the company's dealerships.

The volume of motor cycle sales fell during the year and the number of outlets was reduced accordingly, but the directors still feel that the specialist motor cycle depots will continue to contribute to profitability.

Contract hire, where the group's net investment rose 84 per cent. to £0.89m., showed increased profitability, and has considerable growth potential the chairman says.

If the more favourable level of money costs seen since in the second half is maintained the finance division will make further advance on the £357,000 profit reported for 1976/77. Banking and instalment credit made steady progress and net investment in this sector was up more than £1m. at £5.19m.

Meeting, Sunderland, on March 10 at noon.

Ang.-African £243,902

Profits of Anglo-African Finance Co., for the 18 months to July 19 1977 emerged as £243,902 against £179,719 for the previous year after tax of £78,535 compared with £57,772.

Earnings per 7½p share are 2.64p (1.95p) and the dividend is stepped up to 1.125p (0.75p) for the period with a net 0.5625p final.

BENLOX HOLDINGS

Benlox Holdings announces that as part of the reappraisal of the Benlox Group following recent management changes, it has been decided to call a meeting of the creditors of the wholly owned subsidiary, Frederick J. Minns and Company.

BOARD MEETINGS

The following companies have notified dates of Board meetings to the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available whether dividends concerned are interims or finals and the sub-divisions shown below are based mainly on last year's timetable.

TO-DAY

Interims — Footwear Industry Investments, Gripperrods, Jentique, Kursaal, Orme Developments, Stirling Knitting, Joseph Stocks.

Finals—Drayton Commercial Investment, Marchwiel.

FUTURE DATES

Interims—	
Apex Properties	Feb. 22
Austin (F.) (Leyton)	Feb. 24
Diploma Investments	Mar. 1
Douglas (Robert M.)	Feb. 27
Johnson and Firth Brown	Feb. 23
Finals—	
Aquis Securities	Feb. 21
Cardinal Investment Trust	Feb. 23
Early (Charles) and Marriott (Witney)	Mar. 31
Howden (Alexander)	Mar. 9
Squirrel Horn	Feb. 23
Stone-Platt Industries	Mar. 29
Westwood Dawes	Feb. 23

Midland Farmers

An increase of £6m. in sales to £29m. with a profit increase of £276,519 to £348,764 is reported by Midland Shires Farmers, the Worcester based agricultural society.

The directors are recommending an interest rate of 12 per cent. on share capital and a bonus to members on qualifying trade of 2 per cent. plus bonuses on eggs marketed through the society of 4p per case in addition to the bonuses already paid.

Interest on loan capital has already been paid at 12 per cent. The total recommended distributions of share interest and bonus are £495,000 making such returns to farmers over the past six years of over £2m.

Reserves are raised by £150,000 to £1,050,000 and Asset Replacement Reserves are increased by £60,000. Strong support by members in reinvestment of bonuses paid placed the company in a strong financial position for growth and sales expansion.

MSF (Meat), in which MSF has the majority shareholding, showed an improved trading profit and is recommending a dividend at the maximum permissible level.

In other marketing activities, both at the fruit and vegetable market and the egg station, successful years were recorded and plans are in hand to improve grain marketing for members.

The latest expansions in activities—the wholly owned machinery business of Richard Colwill and the expanded seed processing plants—made worthwhile contributions.

Turner & Newall on Rhodesia

Turner and Newall points out that it has been cut off from its Rhodesian businesses since UDI in November 1965 and the directors hope that the company will benefit when it can resume control of its interests. However they say that until the Rhodesian Government of the day and other authorities permit access to information and the situation has been fully assessed, they cannot make any meaningful report to stockholders. It may be some time before this is possible, they add.

Norrington declines

Agricultural engineers, merchants and general ironmongers Henry Norrington and Son reports a decline in pre-tax profits from a peak £181,745 to £115,808 for the year to September 30, 1977 in line with the forecast made at halfway, when the net surplus was lower at £65,000 against £104,000.

Full-year turnover amounted to £13.65m. (£10.17m.) and profit was subject to tax of £62,528 (£95,902). Earnings per 5p share are given as down from 2.27p to 1.4p and the dividend is 0.4287p (0.4222p) net.

Retained profit dropped to £36,908 compared with £89,679.

S.E. Council to meet on share placing

THE STOCK Exchange Council will be meeting this week to discuss the conduct of stockbrokers A. J. Bekhor and Co., which handled a controversial share placing last year for Edinburgh Industrial Holdings. The placing, and subsequent dealings in EIH shares, have been the subject of a Stock Exchange investigation which began last August and is now complete.

Unlike three other reports published by the Stock Exchange during the past ten days, the EIH probe involves a member firm. The Council will therefore have to decide whether to treat the EIH affair as an internal matter or whether to continue the recent trend and publish details.

The controversy arose when EIH announced in March, 1977, that it proposed to issue 2.5m. Ordinary shares to clients of A. J. Bekhor at a price of 12½p per share. This compared with a market price of 19½p just prior to the announcement. EIH shareholders subsequently approved the placing at an extraordinary meeting, but also forced the company to offer a further 800,000 shares to existing shareholders on the same terms.

EIH itself looked into suggestions that some institutions which took up part of the placing sold shares in breach of the agreement to remain firm holders for two years. However, the Stock Exchange investigation is understood to have involved an examination of personal dealings in EIH by the Board and by Stock Exchange members.

Meanwhile, on a separate issue the Stock Exchange has taken the unusual step of alerting Member firms to possible abuses of the early disclosure requirements on companies in possible take-over situations. A letter was issued on Friday, mentioning specifically the cases of Senior Engineering, which asked for its shares to be suspended last summer following an approach, and the more recent case of Marshall's Universal which was approached by a Mr. David Maltz over a partial bid. In both instances firm bids have failed to materialise.

Beaumont progress to continue

Sir Cyril Black, the chairman of Beaumont Properties tells shareholders in his annual statement that directors anticipate that the steady progress of the group will be maintained.

As reported on February 3 pre-tax profits for the year to September 30, 1977, rose from £0.79m. to £1.02m. and the dividend total is lifted to 3.4664p (3.1512p) with a final of 2.3114p net.

Sir Cyril adds that the group's improving liquid position, coupled with proceeds of the recent one-for-four rights issue, which will raise some £1.87m., will enable Beaumont to examine the many opportunities of purchasing properties which offer a reasonable return on present lettings but which have potential for the future.

Included in pre-tax profits for the year was an exceptional credit of £117,190 being the surplus on redemption of mortgages repaid during the year. Auditors, Thomson McLintock and Co., say they feel this surplus should have been treated as an extraordinary item under the terms of SSAP No. 6.

Meeting, Winchester House, E.C., on March 20 at 2.30 p.m.

FT Share service

The following securities have been added to the Share Information Service appearing in the Financial Times:—

General Stockholders Investment Trust (section: Investment Trusts)

Sceptre Resources (section: Oils)

Lincroft Kilgour expresses optimism

In his annual statement with accounts, Mr. A. D. R. Holland, the chairman of Lincroft Kilgour Group says that the outcome for 1977-78 is viewed with a measure of optimism, notwithstanding any unrealised exchange losses resulting from sterling appreciation since the year-end.

Members are told that business in the merchanting division remains satisfactory, as does demand for the products of all sections of the clothing division, and sales are presently running ahead of last year.

As reported on January 20, pre-tax profits jumped 36 per cent. to a record £1.04m. for the year to September 30, 1977, due to an increased volume of trade in the merchanting division allied with an upturn in demand for men's suits from the mail order trade during the second half.

A statement of source and application of funds shows that at the year-end, working capital increased by £1,018,870 (£287,733 decrease).

Mr. Holland reports that 80 per cent. of the merchanting division's sales in the year, were either directly exported or sold by its overseas subsidiaries and, of its home sales, a considerable proportion were exported indirectly by cloth shops and tailors.

During the year the largest part of the clothing division, the Yorkshire-based section, began to reap the benefit of the rationalisation of its production carried out in 1975-76. This has now been carried a stage further by the complete reconstruction of its management team and further steps are in hand to achieve better productivity and a higher quality product.

The bespoke tailoring section had a very successful year states the chairman. However, in search of growth, the showrooms at 33A Dover Street were enlarged.

The shirt section in Ballymena had a difficult year but, nevertheless, traded profitably. Production was halted by a move to a modern factory with the latest machinery for the bulk production of high quality shirts, which should enable the shirt section not only to enter export markets for the first time, but also to expand its existing U.K. trade.

Meeting, 6, Belgrave Square, S.W., March 21 at 12.30 p.m.

Tyndall to reorganise

Tyndall, the Bristol-based unit trust and life assurance group, is planning a major reorganisation of its investment department which will involve a larger portion of its £200m. worth of funds under management being handled outside London.

The changes, which coincide with the departure of Mr. Ken Renton, the investment director, will mean that only £40m. of the total investment funds will be managed from London. Approximately £140m. will be administered in Bristol, with the remaining £20m. managed in Scotland. The move to switch management of the funds to Bristol has been a long-term objective of the Tyndall Board, which at the same time has been at pains to stress that this does not reflect dissatisfaction with the London operation.

Outlook at Glanfield Lawrence

DIRECTORS OF Glanfield Lawrence repeat in the report and accounts their fear that certain freehold properties might be included in the accounts at more than their realisable value.

They say that the figure of £1,328,628 for certain freehold properties shown in note 2 to the accounts is based on a September, 1973, valuation.

One of these properties was sold in December, 1977, after the October 2 balance date, at less than the valuation figure, but in excess of the 1965 cost.

The directors are of the opinion that the remaining properties might not realise the full valuation figures if they were sold now.

But because there are no plans to sell these properties at the present time they consider that the cost of a current valuation is unwarranted. They first aired the warning in last year's accounts.

The report of the auditors Chantrey Button and Co. makes no mention of the valuation and says the accounts give a true and fair view of the state of affairs at October 2.

The total value of freehold properties in the accounts is £1,573,571, which includes an at-cost valuation of certain properties of £244,943.

At the 1973 revaluation of properties a £788,527 surplus arose and was transferred to reserves. With retained profits of £36,934 it lifted reserves from £447,064 to £1,272,525.

Glanfield Lawrence expects the current year's results to show an improvement on last year's £86,128 profit, and Mr. J. R. Glanfield, chairman, says sales and profits are following a similar pattern to 1976-77.

However, the heavy cost of the group's re-organisation is behind it, bank interest rates are lower, and its manufacturers are expecting a further upturn in market penetration for both cars and commercial vehicles.

Cheltenham & Gloucester

Another of the top 20 building societies, Cheltenham and Gloucester, has come up with record results for 1977. A 50 per cent. increase in the deposits made during the year, to £263m., has enabled the society to lend a record £87.8m. on mortgage—with some £12.5m. of it on new property, to increase its liquidity ratio from 16.6 to 24.9 per cent.

At end-December, liquid funds were entered in the books at £125.69m., and their book value was slightly higher.

APPOINTMENTS

A. B. Richards heads UDT (Scotland)

Mr. A. B. Richards has been appointed chairman (non-executive) of UNITED DOMINIONS TRUST (Scotland), the newly-formed UDT subsidiary. Other directors are Mr. A. R. Morrison (managing), Mr. W. S. Turnbull (sales), Mr. C. C. Mudie (business finance), Mr. I. A. Miller and Mr. E. R. Bishop (director and secretary).

*

Dr. Mike Smith and Mr. Ron Ogle have joined the main Board of ARGOS DISTRIBUTORS. Both were appointed associate directors in March last year. Dr. Smith is director, marketing planning and Mr. Ogle is director, finance.

*

Mr. Ronald E. Fischbacher has been made technical director of GEC-MARCONI PROCESS CONTROL. In 1972, Mr. Fischbacher was appointed technical director of GEC-Elliott Process Instruments.

*

Mr. Reynold C. MacDonald has become a non-executive director of the WELLMAN ENGINEERING CORPORATION. In addition to being a director of Dexion Comino International in this country, Mr. MacDonald is chairman and chief executive officer of Interlake, Inc., U.S.A. He is also a member of the Board of ARA Services, Inc., Parker-Hannifin Corporation and the Conference Board.

*

Mr. Philip R. Caudill has been appointed to the new post of director of public affairs, PHILLIPS PETROLEUM COMPANY EUROPE-AFRICA, from March 1. He was previously media relations coordinator in the corporate public affairs department in Bartlesville, Oklahoma.

*

Mr. Kenneth Plummer has been appointed chief investment manager of LLOYDS BANK investment department. Mr. Plummer, who has been manager of the bank's West End Trust branch since last August, was assistant chief investment manager between 1975 and 1977.

*

Mr. Oliver Philpot, who has become a member of the NATIONAL ADVISORY COUNCIL ON EMPLOYMENT OF DISABLED PEOPLE, is managing director of Remploy. Mr. Geoffrey Gilbertson, a Remploy non-executive director, has been re-appointed chairman of the Council and Mr. R. S. J. Potter, also a Remploy non-executive director has been appointed a Council member.

*

Mr. Glyn Lloyd, a member of the TUC General Council and an executive committee member of the Union of Construction, Allied Trades and Technicians, has been appointed as a member of the OCCUPATIONAL PENSIONS BOARD. He succeeds Mr. J. G. Haley, who resigned in October 1977 as the Board member appointed after consultation with the TUC.

*

Mr. T. C. Walker has joined the Board of Mervyn Hughes Alexandre Tic (International), as director of engineering recruitment services for the MERVYN HUGHES GROUP.

*

Mr. Michael F. Singer has joined the Board of NATIONAL ELECTRICAL SUPPLIES COMPANY, part of the Crown House Group, as Southern Region director.

*

FERODO, a subsidiary of Turner and Newall, is creating an international division from March 1. Mr. P. M. Howlett, currently a director of Ferodo, will be the new division's general manager, becoming chairman of Ferodo GmbH (Federal German Republic) and a director of Ferodo Italiana. He will also co-ordinate the activities of Ferodo in South Africa, of Nuturn in the U.S.A. and of the friction materials division of Hindustan Ferodo, and will liaise with associated Ferodo companies in Australia, Belgium, France, Italy and Spain. As joint managing director of Ferodo, Mr. M. H. Good now has responsibility for all U.K. operations and will replace Mr. F. G. Carter on the Board of Turner and Newall's subsidiary, Brake Linings. He will become non-executive chairman of that company on the retirement at the end of March of the present chairman, Mr. S. F. A. A. Gosling. Mr. A. C. C. Ferguson is, from March 1, appointed to the new position of deputy managing director of Ferodo, and Mr. R. H. Ross and Mr. G. S. Locke join the Ferodo Board.

*

Mr. R. J. Clayton has been appointed a director of F. and C. MANAGEMENT. He will continue to act as secretary.

*

Mr. C. Cotterell, a director of Machin and Kingsley, part of the Fitch Lovell group, has been elected chairman of the panel products importers section of the TIMBER TRADES FEDERATION.

*

Mr. J. C. Oakley Eccleston, former assistant chief surveyor of the Prudential Assurance Co., has been appointed consultant on property investment to FIELDING, NEWSON-SMITH AND CO.

*

Dr. P. A. Sabine, formerly assistant director (chief geochemist), has become deputy director (chief scientific officer) of the INSTITUTE OF GEOLOGICAL SCIENCES in succession to the late Dr. W. Bullerwell. Mr. P. J. Moore, formerly head of analytical and ceramics unit has been made assistant director (chief geochemist) in succession to Dr. Sabine.

nding dividends etable

e convenience of readers the dates when some of the rtant company dividend statements may be expected in ew weeks are given in the following table. The dates those of last year's announcements, except where the g Board meetings (indicated thus*) have been officially It should be emphasised that the dividends to be ill not necessarily be at the amounts or rates per cent. e column headed "Announcement last year." Preliminary es usually accompany final dividend announcements.

	Date	Announcement last year
-	Mar. 29	Final 9.157
an		
;A	Apr. 20	Ints. due
	Mar. 31	Final 0.6861
p.	Mar. 14	Int. 0.725
	Mar. 23	Final 5.7746
rg	Mar. 11	Final 11.2
	Mar. 7	Int. 208.33 cents
	May 9	Final 11p
k	Feb. 22	Final 5.1424
m	Mar. 14	Finals due
n	Mar. 9	Final 2.289 fcst.
	Mar. 1	Final 3.25
	Mar. 7	Final 3.838
.7	Mar. 24	Final 1.82385
	Mar. 31	Final 5.5
	Feb. 21	Final nil
	Apr. 5	Final 4.36
	Mar. 2	Final 1.95
	Mar. 15	Int. 0.75625
s	Mar. 31	Final 2.86675
a	Feb. 22	Final 1.3475
e	Mar. 10	Final 2.6
	Feb. 21	Sec. int. 0.94
s	Mar. 31	Final 1.5279
	Feb. 23	Int. 8 cents
n	Feb. 27	Final 5.081 fcst.
	Mar. 4	Final 6.7
	Mar. 31	Final 3
	Mar. 15	Int. 1.731
	Feb. 23	Int. 0.5
	Mar. 2	Int. 2.41
	Mar. 6	Final 6.7115
nd.		
	Mar. 28	Final 3.1211
4	Mar. 1	Final 4.1
t	Feb. 23	Final 8.125
	Mar. 15	Final 2
	Mar. 18	Final 2.378
	Feb. 28	Final SHK0.44
	Feb. 23	Final 7.73
	Mar. 30	Final 2.73543
	Mar. 9	Final 3.75
	Feb. 23	Sec. int. 6.78035
	Mar. 8	Fin. 5.2546 fcst.
	Feb. 23	Int. 4.688 fcst.
1	Mar. 15	Final 2.1759
	Mar. 22	Final 4 fcst.
	Mar. 29	Final 1.317

	Date	Announcement last year
Legal and Genl. Assce.	Mar. 30	Final 3.249
London Brick	Mar. 31	Final 1.7576
Lucas Inds.	Mar. 31	Int. 3.122
*Marchwiel	Feb. 20	Final 2.13
*Mercantile Inv. Tst.	Mar. 6	Final 0.65
Merchants Trust	Mar. 14	Final 1.475
*Midland Bank	Mar. 10	Sec. int. 7.62592
*NatWest Bank	Feb. 28	Final 5.6828
*Neepsend	Feb. 23	Int. 0.8375
*Peachey Prop.	Mar. 9	Sec. int. 0.25
Pearl Assce.	Mar. 30	Final 7.41771
*Plantation Hldgs.	Feb. 22	Final 1.0065
Provident Financial	Feb. 21	Sec. int. 4.4233
Prudential Assce.	Mar. 30	Final 3.732
Pye (Hldgs.)	Mar. 25	Final 2.9
*Ransomes Sims and Jefferies	Feb. 27	Final 5.345
Reckitt and Colman	Mar. 29	Final 5.3332
*Rentokil	Mar. 8	Final 1.3
Rockware	Mar. 23	Final 2.1672
Rolls-Royce Motors	Mar. 21	Final 2.2
Royal Dutch Petroleum	Mar. 10	Final Fls.5.50
*Royal Insce.	Mar. 2	Final 8.896
Schroders	Mar. 30	Final 7.2425
Scottish Met. Prop.	Mar. 29	Int. 0.9
Scot. Utd. Inv.	Feb. 5	Final 1.2
*Sedgwick Forbes	Feb. 29	Final 6.69 fcst.
Shell Transpt.	Mar. 10	Final 6.778
Slough Estates	Mar. 30	Final 1.576
Smith and Nephew	Mar. 24	Final 1.4497
*Smith Bros.	Feb. 23	Int. 1.5
*Steetley	Mar. 8	Final 3.375
*Stone Platt	Mar. 29	Final 1.53
Tilling (Thos.)	Mar. 17	Final 1.519
*Transport Development	Mar. 9	Final 1.8306
Triplevest	Mar. 31	Final 1.901
*Tube Inv.	Mar. 22	Final 9.901
*Turner and Newall	Mar. 2	Final 5.4787
Unilever	Mar. 1	Final 7.01
Union Corpn.	Mar. 1	Int. divs. due
United Biscuits	Mar. 8	Final 2.6866
*U.S. Debenture Corpn.	Mar. 1	Final 2.36
Weir Group	Mar. 22	Final 3.19
Willis Faber	Mar. 28	Final 5
*Woolworth (F. W.)	Mar. 8	Final 2.725
Youghal Carpet	Mar. 23	Final 4.09

* Board meetings intimated. † Rights issue since made. ‡ Tax free. § Scrip issue since made from reserves.

c Works Loan Board rates

Effective from February 18.

	Quota loans repaid by EIP†	by ER‡	at maturity	Non-quota loans A* repaid by EIP†	by ER‡	at maturity
......	9¾	9¾	10	10¾	10⅞	11¼
o 10	10½	10⅞	11⅛	11½	11⅝	11⅞
o 15	11	11¼	11½	11⅝	11¾	12⅛
o 25	11½	11⅝	11⅞	12	12¼	12⅜
......	11¾	12	12	12⅜	12½	12⅝

ota loans B are 1 per cent. higher in each case than non-. † Equal instalments of principal. ‡ Equal repayments.

NT ISSUES

EQUITIES

1977/8 High	Low	Stock	Closing Price p	+ or −	Div. p. or Amount	Times covered	Gross Yield	P/E Ratio
—	—	—	—	—	—	—	—	—

FIXED INTEREST STOCKS

1977/8 High	Low	Stock	Closing Price £	+ or −
140	133	Automated Secs. 8% Cnv. Cum. Pref.	132	—1
105p	101p	Batleys of Yorkshire 10% Cum. Pref.	105p	......
109p	99p	Centreway 11% Cum. Pref.	108p	......
100	90¼	Grampian Reg. 10¾% 1985	100	......
$98	$96¼	Inco 8½% Notes 1984	$97	......
$98	$96¼	Do. 9% Deb. 1992	$97	......
56⅝	50½	Kensington & Chelsea 11¾% 85-87	51¾	......
100½	99⅞	Do. Do. Variable '82	100⅝	......
100¼	100⅛	Leicester Variable 1982	100¼	......
102	100	Pearson (S.) 10½% Pty. Cnv. Ln. 1993-98	100	......
£99¾	£98⅝	Rowntree Intl. 10¼% 1988	£98¾	......
£99	£98½	Sears Intl. Fin. N/V. 10¼% 1988	£98½	......
$97	$96	Shell Intl. Fin. N/V. 8¼% Gunr. Notes 1990	$97	......
100⅛	99¾	Tameside Variable 1983	100	+⅛
10⅝	7½	Do 10% Red '84-5	9¼	+⅛
105p	104p	Whitehouse (G.) 11% Cum. Pref.	104½p	+½

"RIGHTS" OFFERS

Latest Renunc. Date	1977/8 High	Low	Stock	Closing Price p	+ or −
—	21pm	19pm	A.G.B.	19pm	......
24/2	122	116	Arlington Motor	116	—1
10/3	79	60	Cableform	66	—2
27/2	51	38	Christy Bros.	42	......
10/3	52½pm	42pm	Comm. Bank of Australia	44pm	+2
—	11¼pm	9½pm	Crystalate	9½pm	—1
17/3	42½	36	L.R.C. International	40½	......
30/3	28	26¾	Manchester Garages	26	......
31/3	17pm	8pm	Midland Bank	10pm	+1
3/3	201	181	National Bank of Australasia	190	......
10/3	94	81½	Neill (Jas.)	87	......
3/3	84	71	Preedy (Alfred)	80	......

date usually last day for dealing free of stamp duty. b Figures tus estimate. g Assumed dividend and yield. u Forecast dividend: revious year's earnings. F Dividend and yield based on prospectus estimates for 1978. Q Gross. T Figures assumed. ‡ Cover allows shares not now ranking for dividend or ranking only for restricted ing price to public. pt Pence unless otherwise indicated. ¶ Issued ered to holders of Ordinary shares as a "rights." ** Rights alisation. †† Minimum tender price. §§ Reintroduced. ¶¶ Issued h reorganisation merger or take-over. ||| Introduction. □ Issued ence holders. ■ Allotment letters (or fully-paid). ● Provisional lotment letters. ★ With warrants.

BASE LENDING RATES

nk	6½%	■ Hill Samuel §	6½%
h Banks Ltd.	6½%	C. Hoare & Co. †	6½%
Express Bk.	6½%	Julian S. Hodge	7½%
k	6½%	Hongkong & Shanghai	6½%
: Ltd.	6½%	Industrial Bk. of Scot.	6½%
sbacher	6½%	Keyser Ullmann	6½%
Bilbao	6½%	Knowsley & Co. Ltd.	9 %
redit & Cmce.	6½%	Lloyds Bank	6½%
yprus	6½%	London & European	8½%
.S.W.	6½%	London Mercantile	6½%
lge Ltd.	6½%	Midland Bank	6½%
Rhone	7 %	■ Samuel Montagu	6½%
Bank	6½%	■ Morgan Grenfell	6½%
hristie Ltd.	8½%	National Westminster	6½%
oldings Ltd.	7½%	Norwich General Trust	6½%
: of Mid. East	6½%	P. S. Refson & Co.	6½%
ploy	6½%	Rossminster Accept'cs	6½%
rmanent AFI	6½%	Royal Bk. Canada Trust	6½%
& C Fin. Ltd.	9 %	Schlesinger Limited	6½%
1.	7 %	E. S. Schwab	8½%
dings	8 %	Security Trust Co. Ltd.	7½%
se Japhet	6½%	Shenley Trust	9½%
tes	7½%	Standard Chartered	6½%
ed Credits	6½%	Trade Dev. Bank	6½%
ve Bank *	6½%	Trustee Savings Bank	6½%
Securities	6½%	Twentieth Century Bk.	7½%
nnais	6½%	United Bank of Kuwait	6½%
s Popular Bk.	6½%	Whiteaway Laidlaw	7 %
awrie ¶	6½%	Williams & Glyn's	6½%
st	6½%	Yorkshire Bank	6½%
ranscont.	8 %		
lon Secs.	6½%		
Fin. Corpn.	8½%		
Secs. Ltd.	8 %		
bbs	6½%		
Guaranty	6½%		
Bank ‡	6½%		
lahon	6½%		
Bank	6½%		

■ Members of the Accepting Houses Committee.
* 7-day deposits 3%, 1-month deposits 3¼%.
† 7-day deposits on sums of £10,000 and under 3%, up to £25,000 3½% and over £25,000 4¼%.
‡ Call deposits over £1,000 3%.
§ Demand deposits 4%.
¶ Rate also applies to Sterling Ind. Secs.

INTERNATIONAL COMPANY NEWS

Alfa Romeo builds new Naples plant despite mounting losses

BY DOMINICK J. COYLE

ROME, Feb. 19.

ALFA ROMEO, Italy's State-controlled motor manufacturing group which is part of the giant Instituto per la Ricostruzione Industriale (IRI) holding company, is to build a new production unit in the Naples area, despite the massive and mounting losses of its Alfa Sud operations in the area.

No final official figures for Alfa Romeo's overall operating losses last year have yet been published but losses will exceed the group's L80bn. deficit (£48m.) in 1976. One unofficial estimate puts the operating losses last year at more than L140bn. (£85m.), and some company sources claim that Alfa Sud (South) alone had losses of close on L400bn. (£242m.) in 1977, offset of course by profits elsewhere in the group.

The decision to build another production unit in the south is part of a new labour contract negotiated finally at the week-end after almost one year's discussions between employers and trade unions. The new plant, which is scheduled to come into production inside three years, will provide up to 1,400 new jobs and is to concentrate on the manufacture of medium-sized cars and industrial vehicles.

The decision to go ahead with another production unit in the Naples area, where Alfa Romeo has experienced some of the worst industrial disputes in all of Italy, is said to be part of a reorganisation of labour and manufacturing utilisation in the region.

The new labour contract, which in its final form will be considered formally this week both by employers and trade unions directly concerned, provides an average monthly increase of £10 for most workers, together with a lump sum payment, mainly in consideration of the delay in agreeing on a new wages pact.

Alfa Romeo, with a combined workforce of more than 40,000, initially planned a daily output of 750 vehicles at its Pomigliano d'Arco plant near Naples. This production target was later dropped to 550 cars, while in practice the daily output now averages no more than 420 vehicles.

The Alfa Sud management has blamed the lack of industrial aptitude by workers who have come from a predominantly agricultural environment; the unions insist that the basic design and lay-out of the Naples plant is not conducive to reaching the kind of productivity levels experienced by the private enterprise Fiat company, or anywhere near that applicable generally in motor manufacturing elsewhere in Europe.

$244m. committed by NIB

FINANCIAL TIMES REPORTER

THE NORDIC Investment Bank (NIB), established in Helsinki in 1976, granted a total of 15 loans amounting to 105m. special drawing rights (SDR), equivalent to $125m. in the period June 1, 1976, to the end of 1977.

In addition, it is said in the bank's first annual report, presented to the Nordic Council of Ministers, NIB made four export financing commitments totalling $119m., so that the overall commitments total approximately $244m. The export projects, which involve power plant projects in the Far East and Latin America, equipment for an oil pipe line in Latin America and a construction project in eastern Europe, are still in the tender stage and the commitments have not yet been taken up.

During NIB's first operational period special attention was paid to establishing a functional organisation, building up a diversified loan portfolio, defining policy objectives for the bank's lend operations and introducing the bank as a borrower on the international capital markets through a $40m. note issue with a coupon of 7¾ per cent. and a maturity of 7 years on the Euro bond market.

NIB—which finances investment projects and exports in the common interest of two or more Nordic countries—has an authorised capital stock of SDR 400m. ($486m.), which the Nordic countries have subscribed according to the respective countries' gross domestic products. As of December 31, the accounts showed a balance of SDR108m. ($131.2m.), net interest earnings of $5.8m. and a net profit of $3.7m. which was transferred to the statutory reserve fund.

Alitalia sees 1977 profit

ROME Feb. 19.

ALITALIA, Italy's state-owned flagship airline, will post a profit for last year, the first since 1969, said its parent company, Istituto per la Ricostruzione Industriale (IRI).

If external factors such as strikes do not intervene, the improvement in the company's performance should continue this year, IRI said in a monthly bulletin.

IRI did not give a precise figure for the expected profits. In 1976, the company lost L40bn.

The number of passengers carried last year rose to 9m. from 7.8m. in 1976.

AP-DJ

Money and Exchanges

Bank of England Minimum Lending Rate 6½ per cent. (since January 6, 1978)

Trade figures, money supply, and fears about reimposition of the "corset" restrictions on banks dominated trading in the London Money Market last week.

Conditions were as nervous as during the previous week, and interest rates were generally firmer. A rise in the money supply outside the official target was widely expected, and the figures were fairly calmly received by the money market.

Special factors played a large part in the rise, and following the Governor of the Bank of England's recent comments on taking a longer term view of published figures, the market was steady but cautious.

Nervous caution was also evident following publication of the January trade figures on Tuesday. The sharp increase in the U.K. trade deficit was not as easily explained as the poor money supply figures, and the market set its tone for the rest of the week from this.

Discount houses became very defensive, marking up buying rates for Treasury bills, and remaining that way throughout. Three-month bills hovered around the trigger point for a rise in Bank of England Minimum Lending Rate for several days, but this was more a reflection of the reluctance to purchase bills in the uncertain conditions rather than a pointer towards a rise in MLR.

The recent rise in the money supply has brought with it speculation about the reimposition of the "corset" restrictions, and this led to some very unusual trading on Wednesday, and the creation of a two-tier market, where day-to-day money lent to the discount houses was at a much lower rate than the interbank overnight rate.

As third Wednesday in the month it was make-up day for the banks, and fears of new restrictions produced a strong desire for the banks to lend funds to the discount houses, since these count as reserve assets without reducing eligible liabilities. Houses found money freely available at very attractive rates, but the market was only helping to fuel its own fears, by contributing towards a further growth in the money supply.

Sterling also suffered under the cloud of the trade deficit and the money supply figures, but was stronger than the dollar on balance. The pound's trade-weighted index, on Bank of England figures, fell to 65.9 from 66.2 on the previous Friday, but gained ground against the U.S. unit. It finished at $1.9445-1.9455, a rise of 95 points on the week.

The dollar's trade-weighted depreciation, as calculated by Morgan Guaranty, widened to 4.83 per cent. from 4.43 per cent. The German D-mark and Swiss franc were particularly strong, and central banks in Europe probably intervened during the week to prevent too sharp a decline by the dollar. The D-mark finished at DM2.0617½ compared with DM2.1035 on the previous Friday, while the Swiss franc closed at Sw.Frs.1.8860, compared with Sw.Frs.1.9305.

Gold touched its highest level since March 1975, and closed at $179-179¾, up $4¼ on the week.

Feb. 17 1978	Sterling Certificate of deposits	Interbank	Local Authority deposits	Local Auth negotiable bonds	Finance House Deposits	Company Deposits	Discount market deposit	Treasury Bills Φ	Eligible Bank Bills Φ	Fine Trade Bills Φ
Overnight	—	4⅛-6	—	—	—	6⅝	4-5	—	—	—
2 days notice	—	—	6⅝-6¾	—	—	—	—	—	—	—
7 days or 7 days notice	—	5⅝-6⅛	5⅞-6	—	6½-6⅞	6	5¼-5⅝	—	—	—
One month	6 1/16-6 3/16	6⅜-6⅝	6⅛-6⅜	6⅝-6⅜	6¾-7	6¾	5¾-5⅞	5 9/16-5 11/16	6⅛	6¾-7
Two months	6 5/16-6 7/16	6½-6⅞	—	6¾-6⅝	7-7½	—	6-6½	5⅞	6⅜	6⅞-7
Three months	7 1/16-6 15/16	7 1/16-7¼	6¾-7	7-6½	7⅜-7¾	7½	6¼-6⅜	5 15/16-6	6 9/16	7
Six months	7½-7⅜	7⅝-7⅞	7¼-7½	7⅛-6¾	7¾-8¼	—	—	—	7⅛	7-7½
Nine months	7⅞-7⅝	7¾-8	—	7⅞-7½	8¼	—	—	—	—	—
One year	7 15/16-7 13/16	8-8¼	7¾-8	8⅛-7¾	8½	—	—	—	—	—
Two years	—	—	8¾-9	—	—	—	—	—	—	—

Local authorities and finance houses seven days' notice, others seven days' fixed. *Longer-term local authority mortgage rate nominally three years 10¼-10½ per cent.; four years 10½-10⅞ per cent.; five years 10⅞-11 per cent. Φ Bank bill rates in table are buying rates for prime paper. Buying rates for four-month bank bills 6 15/16 per cent.; four-month trade bills 7-7¼ per cent.

Approximate selling rate for one-month Treasury bills 5 11/16-5¾ per cent.; two-month 5¾-5 29/32 per cent.; and three-month 5 29/32-5 15/16 per cent. Approximate selling rate for one-month bank bills 6 per cent.; two-month 6⅛ per cent.; and three-month 6 7/16-6 15/32 per cent. One month trade bills 6⅝-6¾ per cent.; two-month 6¾-6⅞ per cent.; and also three-month 6⅞ per cent.

Finance House Base Rates (published by the Finance Houses Association): 7 per cent. from February 1, 1978. **Clearing Bank Deposit Rates** (for small sums at seven days' notice) 3 per cent. **Clearing Bank Rates** for lending 6½ per cent. **Treasury Bills:** Average tender rates of discount 5.9739 per cent.

FOREIGN EXCHANGES

Feb. 17	Bank Rates %	Market Rates Day's Spread	Close
New York	6½	1.9418-1.9468	1.9445-1.9455
Montreal	7½	2.1670-2.1745	2.1730-2.1740
Amsterdam	4½	4.29-4.35	4.31½-4.32½
Brussels	6½	62.25-63.65	62.55-62.65
Copenhagen	9	10.98-11.05	11.01-11.02
Frankfurt	3	3.98-4.02½	4.00½-4.01½
Lisbon	13	77.90-78.40	78.10-78.50
Madrid	8	155.90-156.80	156.65-156.75
Milan	11½	1,660-1,666	1,664-1,665
Oslo	6	10.43-10.48	10.46½-10.47½
Paris	9½	9.35½-9.38½	9.36½-9.37½
Stockholm	8	8.97½-9.03½	9.01½-9.02½
Tokyo	4¼	460-475	465-468
Vienna	5½	28.65-28.90	28.75-28.85
Zurich	1½	3.65-3.68¼	‡3.66½-3.67½

‡ Rates given are for convertible francs. Financial franc 62.50-62.70.

OTHER MARKETS

		Notes Rates	
Argentina	1280-1294	Argentina	1250-1350
Australia	1.7021-1.7198	Austria	28¼-29¼
Brazil	31.54-32.54	Belgium	61½-64½
Finland	8.17-8.19	Brazil	36-40
Greece	68.854-70.552	Canada	2.11-2.21
Hong Kong	8.95-8.98	Denmark	10.9-11.1
Iran	132-138	France	9.30-9.60
Kuwait	0.537-0.547	Germany	3.95-4.10
Luxemb'rg	62.55-62.65	Greece	63-74
Malaysia	4.57½-4.59½	Italy	1650-1750
N. Zealand	1.8879-1.9068	Japan	460-475
Saudi Arab	6.87-6.77	Netherl'nd	425-435
Singapore	4.50-4.52	Norway	10.40-10.60
S. Africa	1.6794-1.7045	Portugal	75-85
U.S.		Spain	155-165
Canada		Switz'land	3.60-3.70
C$1		U.S.	1.93-1.95
U.S. cents	88.46-88.49	Yugoslavia	37½-38½

Rate given for Argentina is a free rate.

GOLD MARKET

	Feb. 17	Feb. 16
Gold Bullion (a fine ounce)		
Close	$179-179¾	$179¼-180
Opening	$179½-180¼	$179-179¾
Morning fixing	$179.60 (£92.401)	$179.25 (£92.659)
Afternoon fixing	$179.45 (£92.310)	$179.35 (£92.544)
Gold Coin domestically		
Krugerrand	$187½-189½ (£96½-97½)	$187¾-189¾ (£96¾-97¾)
New Sov'gns.	$58¼-60¼ (£30-31)	$58¼-60¼ (£30-31)
Old Sov'rgns	$56½-58½ (£29-30)	$56-58 (£28¾-29¾)
Gold Coins (Internat'lly)		
Krugerrand	$184-186 (£94¾-95¾)	$185-187 (£95¼-96¼)
New Sov'gns	$57¼-59¼ (£29½-30½)	$57¼-59¼ (£29½-30½)
Old Sov'gns	$56½-58½ (£29-30)	$56-58 (£28¾-29¾)
$20 Eagles	$278-281	$278-281

Six-month forward dollar 0.32-0.22c pm. 12-month 0.63-0.53c pm.

EXCHANGE CROSS-RATES

Feb. 17	Frankfurt	New York	Paris	Brussels	London	Amst'd'm	Zurich
Frankfurt	—	2.0610-25	42.65-75	6.393-403	3.998-4.008	92.75-85	108.85-109
New York	48.57-60	—	20.69-72	3.115-120	1.9450-9460	45.10-20	53.26-35
Paris	233.81-.31	4.8165-8285	—	14.959-993	9.3675-3875	217.19-69	255.09-59
Brussels	15.62-67	32.28-33	6.69-71	—	62.58-62.84	14.48-54	17.02-11
London	4.00½-01½	1.9445-55	9.36½-37½	62.56-65	—	4.31½-32½	3.66½-67½
Amst'dam	107.745-795	2.2212-37	46.075-125	6.8725-75	4.3175-3225	—	117.465-535
Zurich	91.287-509	1.885-886	39.026-092	5.8388-8538	3.6608-73	84.7244-855	—

U.S. $ in Toronto U.S. $=111.88-92 Canadian cents.
Canadian $ in New York = 89.55-56 cents. U.S. $ in Milan 855.70-856.00
Sterling in Milan 1662.60-1665.50.

FORWARD RATES

	One month	Three months
New York	par-0.10 c. dis	0.10 c. pm.-par.
Montreal	par-0.10 c. dis	0.10 c. pm.-par.
Amst'dam	¾ c. pm-¼ c. dis	2⅝-1⅝ c. pm.
Brussels	5 c. pm-5 c. dis	5 c. pm.-5 c. dis
Cop'nhgn.	7½-9½ ore dis	23½-25½ ore dis
Frankfurt	1⅞-⅞ pf. pm	4⅞-3⅞ pf. pm.
Lisbon	60-150 c. dis	350-570 c. dis
Madrid	30-100c. dis	130-210 c. dis
Milan	8-14 lire dis	23-31 lire dis
Oslo	3½-5½ ore dis	8½-10½ ore dis
Paris	3¼-4¼ c. dis	14-15 c. dis
Stckho'lm	4¼-6¼ ore dis	11½-13½ ore dis
Vienna	par-10 gro dis	4-18 gro dis
Zurich	2⅜-1⅜ c. pm	6⅞-5⅞ c. pm.

EURO-CURRENCY INTEREST RATES*

Feb. 17	Sterling	Canadian Dollar	U.S. Dollar	Dutch Guilders	Swiss franc	W. German mark
†Short term	6-6½	6¾-7¼	6⅝-6⅞	5½-5¾	⅛-par	2 11/16-2 13/16
7 days notice	6⅝-6⅞	6¾-7¼	6¾-7	5⅛-5¾	¼-⅛	2¼-2½
Month	6¾-7¼	6⅞-7¼	6⅞-7⅛	5¼-5½	⅛-¼	2⅞-3
Three months	7 5/16-7 7/16	7-7⅜	7⅛-7⅜	5-5⅜	1/16-3/16	2⅞-3
Six months	8-8½	7⅜-7¾	7⅝-7⅞	5-5¼	⅞-1⅛	3⅛-3¼
One year	8¼-8¾	7⅜-7¾	7⅞-8⅛	5¼-5½	1⅝-1¾	3 5/16-3 7/16

Euro-French deposit rates: two-day 10½-11 per cent.; seven-day 10½-11 per cent.; one-month 12-12½ per cent.; three-month 13½-14 per cent.; six-month 12½-13½ per cent.; one year 13½-12½ per cent.

Long-term Eurodollar deposits: two years 7 15/16-8 1/16 per cent.; three years 8 1/16-8 3/16 per cent.; four years 8 5/16-8 7/16 per cent.; five years 8 5/16-8 7/16 per cent.

The following nominal rates were quoted for London dollar certificates of deposit: one-month 6.90-7.00 per cent.; three-month 7.15-7.25 per cent.; six-month 7.45-7.55 per cent.; one-year 7.75-7.85 per cent.

* Rates are nominal calling rates.

† Short-term rates are call for sterling, U.S. dollars and Canadian dollars; two days' notice for guilders and Swiss francs.

CURRENCY RATES

	Special Drawing Rights February 17	European Unit of Account February 17
Sterling	0.627918	0.638063
U.S. dollar	1.22088	1.24018
Canadian	1.36443	1.38361
Austria sch	18.0474	18.3297
Belgian franc	39.3361	39.9587
Danish krone	6.91617	7.03011
Deutschemark	2.51514	2.55442
Dutch guilder	2.71356	2.75386
French franc	5.88760	5.97914
Italian lira	1044.75	1061.11
Japanese yen	292.396	296.649
Norway krone	6.57006	6.66478
Spain peseta	98.2768	99.6731
Swedish krone	5.65588	5.74325
Swiss franc	2.30498	2.34087

MINING NOTEBOOK

Gold price knocks on the $180 door

BY LODESTAR

IT IS a curious twist of circumstances that in a time of world recession, when prices of base-metals (apart from tin) have fallen to the point at which many mines are losing money, buoyant conditions obtain in the more exotic markets. Gold, diamonds and platinum are all riding high, and further increases in their prices look likely in this "Let them eat cake" situation.

As far as gold is concerned the recovery in the price from just over $104 an ounce in August 1976 to its current level of just under $180 is, of course, largely a reflection of the weakness in the U.S. dollar.

However, industrial buying of gold has grown to the point at which it is reckoned to exceed production and last year's fabrication demand is estimated to have been 10 per cent. greater than in 1976.

At the same time, the bullion market has continued to absorb without difficulty the International Monetary Fund's monthly sales of 525,000 ounces. Each move forward in the gold price has been followed by a period of consolidation which, in chart terms, paints a picture of a soundly based rise.

According to the charts followers the market is now facing a testing point in the shape of the $180 price level. Last week the New York gold price edged a few cents above this figure but failed to make any further headway and on Friday it slipped back to $179.70 while the London close was $179.375.

So this week all eyes will be on the price to see if it can break through the $180 barrier decisively, which, say the chartists, would open the door to much higher ground. Most observers feel that this will happen in due course, but they also know that any improvement in confidence in the dollar could cause a temporary sharp setback in gold. However, the dollar came under pressure on Friday to the extent that European central bank support was triggered off.

Cheap for some

While the rise in the gold price over the past few months has been almost entirely in terms of weak U.S. dollars, in terms of the stronger currencies such as sterling the price has risen much less and, indeed, hardly at all in the case of Swiss francs.

This suits the South African mines because their country's currency is tied to the U.S. dollar and thus they reap the full momentary advantage, whereas European fabricators buying the metal with strong currencies are not being put off by runaway prices, as was the case in 1974.

Much of the same reasoning applies to the Canadians, whose dollar is even lower in value than that of the U.S. And the Toronto gold mines index has risen by 62 per cent. since the beginning of last year.

The FT index of South African golds, however, has gained only half that much to its current 157.1, and this despite the fact that the bullion price is now a few dollars higher than on May 22, 1975, when the index hit its all-time peak of 442.3.

Such is the power of political uncertainty in a sharemarket and, indeed, South African golds still have to live with this problem. But mine earnings and dividends continue to recover from their past setback and risk capital is prepared to weigh this factor against the relatively low share prices, especially when the risk capital is overseas-based and does not have to pay the investment dollar premium.

U.S. buying has become a major force in South African golds, prices of which would be even lower if this demand dried up. A Johannesburg broker friend, however, reckons that U.S. interest is about to increase against the background of economic worries back home and, he says, this view is supported by many U.S. analysts.

For the record, the shares he recommends are Randfontein, Vaal Reefs, Southvaal, Western Areas and, for income, Western Holdings, Free State Geduld, Libanon and Blyvoor. Current London recommendations are: East Driefontein, Randfontein, Western Deep and Vaal Reefs for the institutional investor and for the more venturesome Libanon, Kloof, Doornfontein and Western Areas.

Meanwhile, last week's discussion here of the possibility that a new gold-bearing area is being proved up by the Gold Fields Group in the vicinity of its West Driefontein and East Driefontein mines has brought forth some further intriguing thoughts from Johannesburg.

Richard Rolfe reports from there that Gold Fields of South Africa has put down no less than 10 boreholes in the area between East Driefontein and Libanon. Usually the group is meticulous about publishing drilling results and the fact that it has not done so on this occasion is believed to be because the mining house does not control all the ground it thinks may be of interest.

The story is that West Witwatersrand Areas, the company that became GFSA, allowed the rights to the area to lapse because the ground appeared to be beyond the reef outcrop. Some of the rights have been since acquired by other concerns including Texasgulf which has been looking for manganese, small deposits of which occur in the area.

It would be bizarre, indeed, if this U.S. company thus came in for a stake in a new South African gold mine. Unconfirmed reports suggest that borehole values have ranged up to 20 grams gold per tonne over 100 centimetres, equal to a reasonable 2,000 centimetre-grams. Whether or not a new mine will be warranted depends on how big a payable tonnage is eventually indicated.

If it is large, it is thought that the Government Mining Engineer would push for a separate lease area to be set up. Otherwise, Johannesburg is still sold on the idea that any new pay ground would form an extension to West Driefontein rather than East Driefontein, although the latter seems geographically the more logical recipient in London's thinking.

At all events, Rolfe concludes that no one is rushing to buy shares in West Driefontein yet, but this is definitely an old stager to watch: the mine started production back in 1952.

Saintly Crofty

Finally, last week's flurry of interest in Saint Piran, which followed a Press recommendation, left shares of the group's 65 per cent.-owned South Crofty tin mining subsidiary little moved at 58p. The other 35 per cent. of the Cornish tin producer's shares, it will be recalled, were offered by Saint Piran at 50p to an eager public last October.

The offer was 45 times over-subscribed and South Crofty shares subsequently soared to 90p before coming back to earth. However, the half-time profits showed that the mine was well on its way to achieving the forecast pre-tax profit of £2m. for the full year to March 31 next.

Providing costs are being kept in check the mine should still be doing well because the January tin concentrate output brings the total for the past 10 months to 1,839 tonnes compared with 1,796 tonnes in the same period of 1976-77. Furthermore, the price of tin on the London Metal Exchange has averaged £6,276 per tonne in the past 10 monthst compared with £4,885 in the full year to last March.

INSURANCE

Act which wipes slate clean

BY OUR INSURANCE CORRESPONDENT

THERE is a small but regular flow to the courts of disputes between policyholders and insurers about the fundamentals of the insurance contract—about the proposer's / policyholder's duty to disclose all material facts and about insurers' rights to rescind the contract or refuse claim payments for non-disclosure. The principles were laid down long ago, so that to-day any dispute which reaches the courts concerns the application of those principles to the particular facts of the dispute.

A complicating factor in a number of these disputes is the Rehabilitation of Offenders Act 1974, which wipes clean the convicted person's record. After the appropriate passage of time, the Act entitles him or her to assert a past as unblemished as that of the most upright citizen. To this extent, the long-established insurance law as to materiality has been blunted: for example the motorist convicted of drunken driving in February 1973 does not have to inform his newly-chosen insurers in February 1978. Different offences have different rehabilitation periods and all are set out in the Act.

At first sight the Act is, for the most part, simple, in operation. But it is a complicating factor in insurance disputes which arise on contracts arranged before the Act became operative in 1975, because the Act applies a blanket of inadmissibility to evidence of convictions which should have been disclosed in, say, 1973 but which have been wiped out by the time the dispute comes before the courts.

This blanket can be lifted only under the provisions of section 7 of the Act which provides "if at any stage in any proceedings before a judicial authority in Great Britain . . . the authority is satisfied in the light of any considerations which appear to it to be relevant . . . that justice cannot be done in that case except by admitting evidence relating to a person's spent convictions . . . the authority may admit the evidence."

Last week the effect of this section of the Act fell to be considered by the Court of Appeal in the case of *Reynolds v Phoenix Assurance and others*, a dispute over a fire claim made in 1973 under a policy effected in August 1972. It appears that the plaintiff had been convicted and fined for a criminal offence in 1961, which had not been disclosed to the insurers and which had been discovered only recently. The insurers went to the Court of Appeal after Mr. Justice Forbes had refused their request to amend their pleadings to take account of this information.

The Court of Appeal gave insurers leave to amend, but Lord Denning emphasised that the court was making no decision on the materiality of the old conviction, only that insurers could amend their pleadings to bring the old conviction before the trial judge. Once the amendment was made and the action back in front of the trial judge, it would be for him to be satisfied that justice required the evidence of the old conviction to be accepted. Policyholder and insurers would have to give evidence on this aspect and it would be up to the judge to consider the parties' views and the law as to materiality.

So, the action now continues back in the lower court and further comment at this stage is precluded, but all insurers must watch its outcome with considerable interest and hope perhaps even that some clue may be provided as to how the provisions of section 7 might perhaps be invoked, in respect of convictions sustained, but not disclosed in contracts made since 1975.

SHIPPING

U.S. weather raises rates

BY OUR SHIPPING CORRESPONDENT

BAD WEATHER in the U.S., possibly aided by growing effectiveness of the coalminers' strike, had the predicted effect of strengthening oil tanker charter rates out of the Caribbean last week.

A 37,000 dwt vessel was able to obtain World-scale 110—which is 20 points better than the rate a week earlier—and a 67,000 ton unit received WS75, against WS44½ rate for a 66,000 ton part cargo seven days earlier.

Brokers, however, are not optimistic that the higher rates will hold. Galbraith Wrightson notes that Stateside stocks are still high and that in any case a good proportion of the voyages fixed were for discharge in the U.S. Gulf rather than the blizzard-hit North East Coast.

In the Persian Gulf, rates have not changed from last week's WS21 for VLCCs and WS17.5 for a ULCC. With 12 vessels of about 3.4m. tons waiting for cargoes in the area and another ten of 2.4m. tons due to arrive, broker E. A. Gibson says there is not much prospect of improvement.

Galbraith Wrightson puts the likely vessel availability in the Gulf at the turn of the month at 35 ships, each over 150,000 tons.

There has, however, been some activity out of Indonesia, mainly for the U.S. West Coasts. Rates on this trade hardened slightly with an 80,000-tonner attracting WS42.

Period chartering rates continue to be dull and the BP inquiry for a one- to three-year charter on an 80,000-150,000-ton vessel reported in this column last week has attracted dozens of offers. The oil company has not yet made a deal.

One timecharter concluded was by Pertamina, which fixed a 131,000 dwt vessel for 12/36 months at a reported rate of 80 U.S. cents per ton deadweight.

The conference's rejection of a U.S. proposal for compulsory segregated ballasts in tankers has destroyed any chance of a significant cut in oil tanker capacity. But brokers do feel that the requirements for new tank washing systems will accelerate the rate at which older tankers are scrapped.

LOCAL AUTHORITY BOND TABLE

Authority (telephone number in parentheses)	Annual gross interest	Interest payable	Minimum sum	Life of bond
	%		£	Year
Barnsley Metro. (0226 203232)	9½	½-year	250	4-7
Poole (02013 5151)	9½	½-year	500	4
Poole (02013 5151)	9¾	½-year	500	5-7
Reading (0734 592337)	10	½-year	1,000	5-7
Redbridge (01-478 3020)	9¾	½-year	200	5-7
Southend (0702 49451)	9	½-year	250	3
Thurrock (0375 5122)	9¾	½-year	300	4
Thurrock (0375 5122)	10	½-year	300	5-7
Wrekin (0952 505051)	8	½-year	500	2
Wrekin (0952 505051)	10	yearly	1,000	4

FINANCE FOR INDUSTRY TERM DEPOSITS

Deposits of £1,000-£25,000 accepted for fixed terms of 3-10 years. Interest paid gross, half-yearly. Rates for deposits received not later than 3.3.78.

Terms (years)	3	4	5	6	7	8	9	10
Interest %	9½	9¾	10¼	10½	10¾	11	11¼	11½

Rates for larger amounts on request. Deposits to and further information from The Chief Cashier, Finance for Industry Limited, 91 Waterloo Road, London SE1 8XP (01-928 7822, Ext. 177). Cheques payable to "Bank of England, a/c FFI." FFI is the holding company for ICFC and FCI.

FT SURVEY OF CONSUMER CONFIDENCE

Consumers feel more cautious about future

BY ELINOR GOODMAN, CONSUMER AFFAIRS CORRESPONDENT

A SLIGHTLY more cautious view of the future is reflected in the latest survey of consumer confidence carried out for the Financial Times.

After the exceptionally confident feelings shown in January, consumers were feeling less optimistic at the beginning of this month. But people are feeling more secure than a year ago, and the long-term trend is still improving.

In January, two of the main indices reached new heights. This month they have slipped back slightly and worries about unemployment have increased.

The survey is designed to find out how people feel about the future and their present financial position.

Movements in the indices usually take three to four months to be reflected in buying patterns. The six-month moving average figures used in the table are a better guide to long-term trends than the monthly figures which, as this month's figures show, can fluctuate widely.

Last month's improvement was most noticeable in the Past Prosperity Index which tries to establish whether people feel better or worse off than a year ago.

January was only the second month in seven years in which the number of people feeling better off outnumbered those feeling worse off. This month, those feeling worse off were again in the majority.

Inflation

Just over one-third of the sample said they were less affluent than a year ago and 27 per cent. said the were better off. This gave a balance of 8 per cent. who felt their incomes had not kept pace with inflation.

Among the professional men interviewed, the balance of those feeling worse off was slightly smaller at 3 per cent. but this was still a deterioration on January.

Of all the categories, women from working class backgrounds were feeling worst off.

The six-month moving average figures for Past Prosperity are still improving, however, as people were feeling much more badly hit by inflation seven months ago.

The Future Confidence Index also reached a new height last month. This month it has fallen back sharply though it is still well above last February's level.

Asked whether they expected conditions to get worse or better over the next year, 29 per cent. said better and 22 per cent. worse, giving a balance of 7 per cent. who thought things would improve. This is slightly lower than the December figure.

This gloomy view of the future was expressed by all types of people interviewed. Professional men remain more confident than other categories, with optimists outnumbering pessimists by 21 per cent. Working class women were most pessimistic again this month with pessimists outweighing optimists by 4 per cent.

The six-month moving average figures remained at about last month's level. On this longer term basis, there is a balance of 16 per cent. expecting things to improve.

The most commonly cited cause of optimism was the fatalistic interpretation of events that things must improve. This was followed closely by North Sea oil while the Government was mentioned more often last month.

Slightly fewer people than last month attributed their optimism to the view that inflation was under control while there was a marked drop in the proportion of those who thought that exports were going to help improve prospects over the next year.

Among pessimists, rising prices continued to be the main source of concern, although an increasing proportion hold the more general view that the "trend is to get worse." Concern about strikes and the Government continued to fall.

The number of people expecting employment to increase also rose this month. Almost a quarter more of the respondents thought unemployment would get worse than those who thought it would get better.

This was an increase of 11 per cent. on last month and was most noticeable in the North-east and Scotland where those expecting unemployment to rise outnumbered by 44 per cent those expecting it to fall.

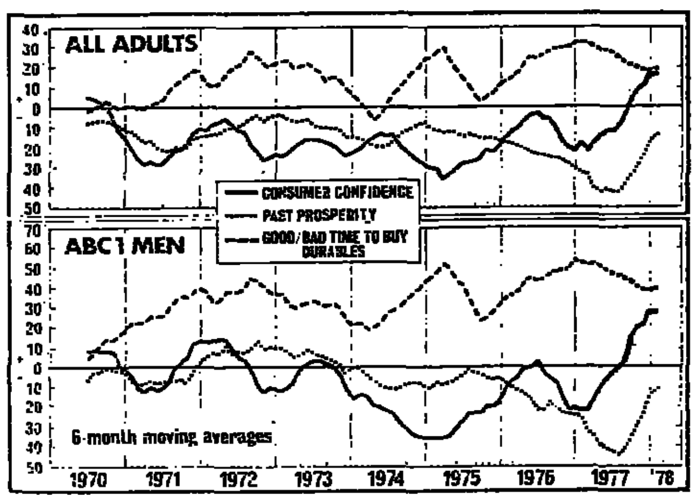
Price rises

The other question the survey asks each month is whether people think it is a good time to buy major things for the house.

Throughout the early part of last year, this index was standing at a very high level. It tends to move in the opposite direction to the trend in inflation, as one of the main reasons for saying it is a good time to buy consumer durables has been that prices are bound to rise.

This month, the Time to Buy Index fell back to show a positive balance of 22 per cent. in favour of buying now. Professional men were even more enthusiastic about the advisability of buying now than they were last month. Those in favour of buying outnumbers those against by 46 per cent. on a monthly basis and by 46 per cent. on the six-month moving average basis.

The survey was carried out by the British Market Research Bureau. A total of 1,026 adults were interviewed between February 2 and 8.



Price Commission seeks industrialist

THE DEPARTMENT of Prices has approached tentatively several industrialists to see if they would be prepared to fill the vacancy on the Price Commission created by the impending departure of one of three deputy chairmen, Dr. Gordon Hobday.

Dr. Hobday, the chairman of Boots, has told the department that he wants to leave the Commission because the job—theoretically a part-time appointment—is too time-consuming to fit in with his other commitments.

Given the discretionary nature of the Commision's powers, its make-up is regarded by industry as crucial to the way the controls are implemented.

The original appointments, announced last summer, gave the Commission a fair balance of industrialists, unionists and consumers, with the chairman, Mr. Charles Williams, coming from banking. The two other deputy chairmen are Mr. John Hughes, from Ruskin College, Oxford, and Mr. S. Sweetman, from Unilever.

TREND OF INDUSTRIAL PROFITS

Rise of 43% in earnings on tax charge stability

THE TREND of industrial profit figures below is based on accounting periods ending in late spring and early summer, so the sample of 223 companies is small and the figures should be interpreted with caution.

Given that provision, one of the more striking features is the way that the stability of the tax charge boosted earnings. *While pre-tax profits rose 22 per cent., the tax charge only rose 4 per cent. Consequently, earnings made a 43 per cent. leap.*

At its extreme, this trend was exemplified by the contracting and construction sector where a fall in pre-tax profits was translated into a rise in earnings by the dramatic drop in taxation.

The only other two sectors with enough results to be at all reliable were clothing and footwear and engineering. The clothing and footwear sector performed particularly strongly, having a 36 per cent. jump in trading profits which came through, after only a small increase in tax, to a doubling of earnings. Engineering, however, generated a gain at the trading level of only 2 per cent. and the earnings improvement was of the same order.

The cash flow for all the industrial companies showed a substantial improvement of 34 per cent. and this was reflected in a 21 per cent. rise in net current assets. But net capital employed rose more sedately at 14 per cent.

TREND OF INDUSTRIAL PROFITS

ANALYSIS OF 223 COMPANIES

The Financial Times gives below the table of company profits and balance-sheet analysis. This covers the results (with the preceding year's comparison in brackets) of 223 companies whose account year ended in the period between April 15, 1977, and July 14, 1977, which published their reports up to the end of January, 1978. (Figures in £000.)

INDUSTRY	No. of Cos.	Trading Profits (1)	% change	Profits before Int & Tax (2)	Pre-Tax Profits (3)	Tax (4)	Earned for Ordinary Dividends (5)	% change	Ord. Dividends (6)	% change	Cash Flow (7)	Net Capital Employed (8)	Net Return on Cap % (9)	Net Current assets (10)
BUILDING MATERIALS	4	32.345 (25.542)	+26.6	23.463 (17.169)	20.202 (14.126)	7.014 (8.689)	12.962 (5.227)	+142.8	8.497 (6.555)	-33.7	12.696 (7.148)	105.228 (93.298)	22.3 (18.4)	27.198 (25,033)
CONTRACTING & CONSTRUCTION	17	31.473 (34.871)	-9.7	24.668 (28.714)	18.097 (22.790)	6.705 (12.309)	12.674 (10.274)	-23.4	4.266 (3.957)	-7.8	13.524 (10.986)	150.388 (135.441)	16.4 (21.2)	73,561 (78,629)
ELECTRICALS (EX ELECTRS) ETC.	7	8.054 (6.527)	-23.4	6.657 (5.327)	6.104 (4.782)	2.827 (2.424)	3.277 (2.358)	-39.0	1.542 (1.320)	+16.8	2.634 (1.850)	24.281 (21.758)	27.4 (24.5)	12.481 (8.859)
ENGINEERING	21	45.542 (44.529)	+2.3	36.765 (34.912)	32.201 (30,397)	15.625 (14.329)	14.884 (14.644)	-1.6	4.583 (4.033)	-13.6	16.310 (18.024)	187.527 (203.752)	19.6 (17.1)	83,958 (88,697)
MACHINE TOOLS	1	694 (570)	+21.8	513 (412)	412 (321)	213 (145)	199 (176)	+13.1	52 (47)	-10.6	249 (226)	1.158 (1.483)	44.3 (27.8)	1,346 (1,202)
MISC. CAPITAL GOODS	8	31.476 (23.959)	+31.4	25.987 (18.525)	20.172 (14,046)	5.155 (7.224)	14.338 (6.214)	-130.7	4.135 (3.186)	+29.8	14.813 (7.649)	160.991 (123.795)	16.1 (15.0)	69,947 (54,594)
TOTAL CAPITAL GOODS	56	149.584 (135.998)	-10.0	118.053 (105.059)	97.188 (86.462)	37.539 (45.180)	58.334 (38.893)	+50.0	23.076 (18.898)	+22.1	60.251 (45.883)	629.573 (579,524)	18.8 (18.1)	268,491 (256,814)
ELECTRONICS RADIO & TV	6	17.519 (13.466)	+30.1	9.244 (5.921)	7.469 (4.285)	2.323 (2.184)	5.091 (2.065)	+146.5	1.402 (1.227)	+14.3	11.496 (7.990)	41.004 (35,175)	22.5 (16.8)	5,722 (2,745)
HOUSEHOLD GOODS	10	13.090 (13.845)	-5.5	9.487 (10.330)	8.045 (9.288)	3.576 (4.832)	4.418 (4.364)	-1.2	1.237 (1.305)	-5.2	5.898 (5.774)	62.235 (52.857)	15.2 (19.5)	24,750 (21,983)
MOTORS & COMPONENTS	2	11.241 (8.184)	-37.4	8.676 (6.136)	6.775 (5.198)	3.481 (2.718)	3.219 (2,458)	-32.0	1.036 (493)	-111.4	4.491 (3.572)	44.181 (33.196)	19.6 (18.5)	17,032 (9,516)
MOTOR DISTRIBUTORS	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
TOTAL CONSUMER DURABLES	18	41.850 (35,495)	+17.9	27.407 (22.387)	22.239 (18.771)	9.380 (9.734)	12.728 (8.857)	+43.5	3.675 (3.020)	-21.6	21.985 (17.336)	147.420 (121,228)	18.6 (18.5)	47,504 (34,242)
BREWERIES	3	56.637 (50.715)	+11.7	47.588 (42.061)	42.395 (36.125)	21.420 (18.925)	20.389 (16.651)	+22.4	9.303 (8.420)	-10.5	19.453 (16.266)	309.585 (289.156)	15.4 (14.5)	30,924 (27,864)
DISTILLERIES & WINES	2	3.293 (2.749)	+19.8	2.706 (2.265)	2.364 (1.955)	1.082 (1.068)	1.011 (665)	-48.0	311 (279)	+11.5	1.037 (713)	13,829 (11.016)	19.6 (20.6)	6,855 (5,304)
HOTELS & CATERERS	2	2.272 (1.822)	+24.7	1.901 (1.498)	1.358 (955)	634 (472)	719 (491)	-46.2	188 (169)	-11.2	757 (532)	9.012 (9,168)	21.1 (16.3)	—1,635 (—2,401)
LEISURE	7	115.376 (94.240)	+22.4	92.709 (75.904)	77.063 (66.943)	37.215 (34.711)	35.538 (28,293)	+25.6	10.693 (7.284)	+46.3	44.381 (36.874)	332.146 (244.656)	27.9 (31.0)	84.502 (56,487)
FOOD MANUFACTURING	7	34.721 (30.107)	+15.3	29.421 (23.246)	25.083 (20.420)	11.931 (11.645)	12.887 (9.534)	+35.2	4.056 (3.564)	+19.9	13.526 (10.605)	150.517 (148.305)	19.5 (17.0)	71.996 (66.811)
FOOD RETAILING	8	59.394 (40.112)	+48.1	48.983 (31.819)	45.607 (28.636)	18.120 (17.542)	27.424 (13.452)	+104.2	5.177 (4.312)	-20.1	31.570 (15.364)	157.563 (133.979)	31.1 (23.7)	12,506 (7,322)
NEWSPAPERS AND PUBLISHERS	3	4.844 (3.751)	+29.1	3.182 (2.209)	2.982 (2,048)	1.177 (1.103)	1.787 (937)	+90.7	647 (574)	+12.7	2.258 (1.378)	14.085 (13.029)	22.6 (17.0)	3.531 (2,222)
PACKAGING AND PAPER	3	6.425 (4.783)	-34.3	5.287 (3.815)	5.234 (3.760)	2.750 (2.001)	2.484 (1.755)	+41.5	443 (391)	-13.3	2.905 (2.154)	12.421 (9.848)	42.6 (38.7)	8,409 (5,949)
STORES	10	14.433 (11.686)	+23.5	11.474 (8.868)	10.491 (8,067)	4.834 (4.597)	5.641 (3.460)	+63.0	2.051 (1.596)	-28.5	5.615 (3.702)	49,288 (42,609)	23.3 (20.8)	26.429 (20,645)
CLOTHING AND FOOTWEAR	19	21.327 (15.619)	-36.5	17.632 (12.192)	14.975 (10.216)	6.519 (5.782)	8.954 (4.394)	-103.8	1.857 (1.433)	-29.6	9.291 (4.906)	73.101 58.278	24.1 (21.7)	35.272 (24.940)
TEXTILES	7	11.260 (9.729)	-15.7	9.646 (7.772)	8.470 (6.898)	3.650 (3.697)	4.744 (3.163)	-50.0	1.101 (977)	+12.7	5.297 (3.652)	35.744 (30.560)	27.0 (25.4)	19.050 (15.021)
TOBACCO	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
TOYS AND GAMES	1	4.791 (3.397)	+41.0	3.963 (2.790)	3.508 (2.421)	265 (1.193)	3.230 (1.243)	-150.0	443 (312)	-42.0	3.263 (1.226)	17,637 (11,595)	22.4 (24.0)	6.451 (4.174)
TOTAL CONSUMER NON-DURABLE	72	354.775 (268.710)	-24.6	274.497 (216.429)	239.550 (188.444)	109.597 (102.674)	124.807 (84.041)	-48.5	36.270 (29.131)	-24.5	139.354 (98.592)	1.174.780 (1,300.197)	23.4 (21.6)	304.289 (234.328)
CHEMICALS	4	112.448 (95.773)	+17.4	100.004 (84.557)	91.713 (76.968)	45.128 (38.954)	45.090 (36.551)	-23.4	9.135 (9.223)	+11.1	47.511 (52.816)	370.910 (311.185)	27.0 (27.2)	204.680 (162.689)
OFFICE EQUIPMENT	1	7.626 (5.343)	-42.7	6.819 (4.702)	6.520 (4.240)	3.399 (2.312)	3.053 (1.910)	-60.0	620 (522)	+14.9	2.920 (1.748)	13,421 (10,617)	50.8 (44.3)	9.770 (8.221)
SHIPPING	1	1.527 (2.394)	—36.2	476 (1.610)	—564 (1.111)	— (199)	—564 (912)	—161.8	175 (156)	-12.2	280 (1,541)	28.542 (19.567)	1.7 (8.2)	—3.556 (—2.396)
MISC. INDUSTRIAL	12	46.611 (35.667)	-30.7	35.242 (25.592)	25.436 (17.866)	12.449 (9.563)	11.782 (7.490)	-57.3	3.559 (3.234)	-9.4	17.966 (12.831)	144.344 (151,094)	24.4 (16.9)	49.419 (54.839)
TOTAL INDUSTRIALS	166	694.419 (579.380)	-19.9	562.498 (460.336)	482.132 (395.962)	217.492 (208.357)	256.232 (178.664)	+42.9	76.466 (63.186)	+21.0	290.157 (216.567)	2.508,999 (2,195.400)	22.4 (21.0)	880.597 (738,737)
OIL	1	279 (91)	-206.9	216 (50)	110 (—70)	— (—)	110 (—70)	-257.1	— (—)	—	125 (—62)	4.004 (3,502)	5.4 (1.7)	447 (460)
BANKS	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
DISCOUNT HOUSES, MERCHANT BANKS etc.	4	20.861 (14.477)	+44.1	— (—)	— (—)	— (—)	8.934 (5.896)	-51.5	4.253 (3.099)	+37.5	— (—)	835,777* (672,270)*	— (—)	21,003 (16,096)
HIRE PURCHASE	1	123.170 (119.000)	-3.5	112.070 (106.700)	12,200 (4.100)	6,300 (5,600)	3,700 (—5,300)	-169.8	— (—)	—	15.900 (6.100)	111.200 (121.400)	100.8 (87.9)	164,200 (208,700)
INSURANCE	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
INSURANCE BROKERS	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
INVESTMENT TRUSTS	30	28.796 (24.727)	+16.5	28.412 (24.450)	24.120 (20.486)	8.321 (7.904)	15.166 (12.088)	+25.5	12.720 (10.855)	+17.2	2.446 (1,268)	522,470 (473,451)	5.4 (5.2)	5,750 (55,650)
PROPERTY	11	17.917 (15.335)	+16.8	17.004 (14.449)	7.782 (5.901)	3.448 (2,538)	4,237 (3.171)	+33.6	2.704 (1.970)	-37.3	1.537 (1,581)	200.796 (221,296)	8.5 (6.6)	—5,990 (—64)
MISC. FINANCIAL	8	11.512 (15.663)	—26.5	9.774 (9.926)	6.316 (4.556)	2.770 (2,637)	3.284 (1.646)	-99.5	2.208 (1.821)	+21.3	1.897 (621)	140,586 (123,045)	7.0 (8.1)	13,642 (12,093)
TOTAL FINANCIAL	54	202.256 (189.202)	+6.9	167.260 (155.525)	50.418 (35.043)	20.759 (19.679)	35.521 (17.501)	+101.9	21.687 (17.744)	+25.5	19.750 (9.570)	1975,068 (1939.192)	17.2 (16.6)	198,385 (291,475)
RUBBERS	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
TEA	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
TIN	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
MISCELLANEOUS MINING	—	— (—)	—	— (—)	— (—)	— (—)	— (—)	—	— (—)	—	— (—)	— (—)	— (—)	— (—)
OVERSEAS TRADERS	2	63.118 (53.414)	+18.2	50.358 (42.912)	32.871 (27.631)	13.977 (14.905)	15.749 (10.014)	+57.3	5.326 (3.926)	-35.7	21.621 (15.228)	414.461 (283.915)	12.2 (15.1)	134,879 (109,893)
TOTAL COMMODITIES	2	63.118 (53.414)	+18.2	50.358 (42.912)	32.871 (27.631)	13.977 (14.905)	15.749 (10.014)	+57.3	5.326 (3.926)	-35.7	21.621 (15.228)	414.461 (283.915)	12.2 (15.1)	134,879 (109,893)

NOTES ON COMPILATION OF THE TABLE

The classification follows closely that of the Institute and Faculty of Actuaries, which has been adopted by the Stock Exchange Daily Official List.

Col. 1 gives trading profits plus investment and other normal income properly *belonging to the financial year covered*. The figure is struck before charging depreciation, loan and other interest, directors' emoluments and other items normally shown on the profit and loss account. Excluded are all exceptional or non-recurring items such as, for example, capital profits unless the latter arise in the ordinary transaction of business.

N.B.—Certain companies, including merchant banks, discount houses, insurance *and shipping companies are* exempted from disclosing the full information required under the Companies Act, 1948.

Col. 2 gives profits before interest and taxation that is to say profits after all charges except loan and other interest but before deducting taxation provisions and minority interests. In the case of Banks no figure can be shown because of non-disclosure (see foregoing paragraph).

Col. 3 gives Pre-tax Profits that is to say profits after all charges including debenture and loan interest but before deducting taxation provision and minority interests.

Col. 4 groups all corporate taxation *including Dominion, Colonial and Foreign* liability and future tax provisions but excludes adjustments relating to previous years.

Col. 5 gives the net profits accruing on equity capital after meeting—

1—Minority interests.
2—All prior charges—sinking fund payments, etc., and *Preference dividends* and
3—Provisions for staff and employees pensions funds where this is a standard annual charge against net revenue.

Col. 6 sets out the net cost of dividend on equity capital.

Col. 7 is the capital generated internally over a year's trading. For the purposes of comparison equity earnings plus depreciation less equity dividends is the recognised method of computing this figure.

Col. 8 constitutes the total net capital employed. This is the total of net fixed assets—excluding intangibles such as goodwill—plus current assets less current liabilities, except bank overdrafts.

* For merchant *banks and discount* houses a more realistic figure to quote is the balance-sheet total.

Col. 9 represents the net return on capital employed Col. 2 as a percentage of Col. 8 provides an indication of average profitability.

* Excluding merchant banks, discount houses, insurances, etc.

‡ No figures given.

Col. 10 net current assets are arrived at by the subtraction of current liabilities and provision from current assets.

Bush Hill car park

The first commuters' car park to be opened jointly by the Greater London Council and British Rail starts operating to-day at Bush Hill Park station, Enfield. It will be open for car park season ticket holders only and has space for 60 cars.

Wool trade 'losing men'

SKILLED workers in the Yorkshire wool textile industry are leaving to become postmen and dustbin men, a trade union leader claimed yesterday.

Mr Fred Towers, secretary of the Yorkshire Society of Textile Craftsmen, said in his annual report that there was a dearth of skilled men because of the *inadequate pay for shift working* which was vital to the economy of the industry and to maintain production.

Seventy three skilled craftsmen had left in the past year and a high rate of retirement and lack of job security had contributed to the shortage.

Egg packing plant to close

FORTY workers will lose their jobs in April when the Thames Valley Egg Company's packing station at Marsham, near Norwich, closes. Production is to be concentrated on three other stations in East Anglia.

FINANCIAL TIMES REPORT

Monday February 20 1978

CONFERENCE CENTRES

Both internationally and domestically the conference market has shown remarkable vitality against a faltering economic background. Now the industry is thinking in terms of a renewed boom in convention business.

sing

S little doubt that a years ago the inter- onference and exhi- siness stood a little There had been a ilding as a result of s optimism and com- as growing. At the the world economy ie wobble. The lead onference planning is many in the business erned that the un- of 1974-76 would zin to show in the f 1977-78. In fact the ion has proved worse fact. Convention and traffic has kept up y well in spite of the problematic environ- in which the inter- usiness community is the moment.

e can be said of the stic conference busi- h seems to be as as ever. However, ly the picture is mewhat by the over- en conferences and . There is no ques- banqueting, particu- ocial gatherings, has adly during the past five years with a large amount of trading down for such occasions as annual dinners and wedding receptions. Thus, although the conference business itself has held up reasonably well, there is many a banqueting/conference manager who would prefer overall business to be a little brisker. The buoyancy of the conference market itself is not difficult to analyse, with hindsight. The need for communication at a personal level is still the driving factor. In most industries and other activities, from engineering to medicine, social services to oil exploration, senior executives and particularly those involved in problem solving and innovation have an increasing need for a cross fertilisation of ideas. Although electronic and printed information is supplied in abundance, this is not sufficient to make personal exchanges of views and ideas redundant. The importance of a conference is not only what is said from the platform, but the total atmosphere of the event and the stimulation that is provided as a result.

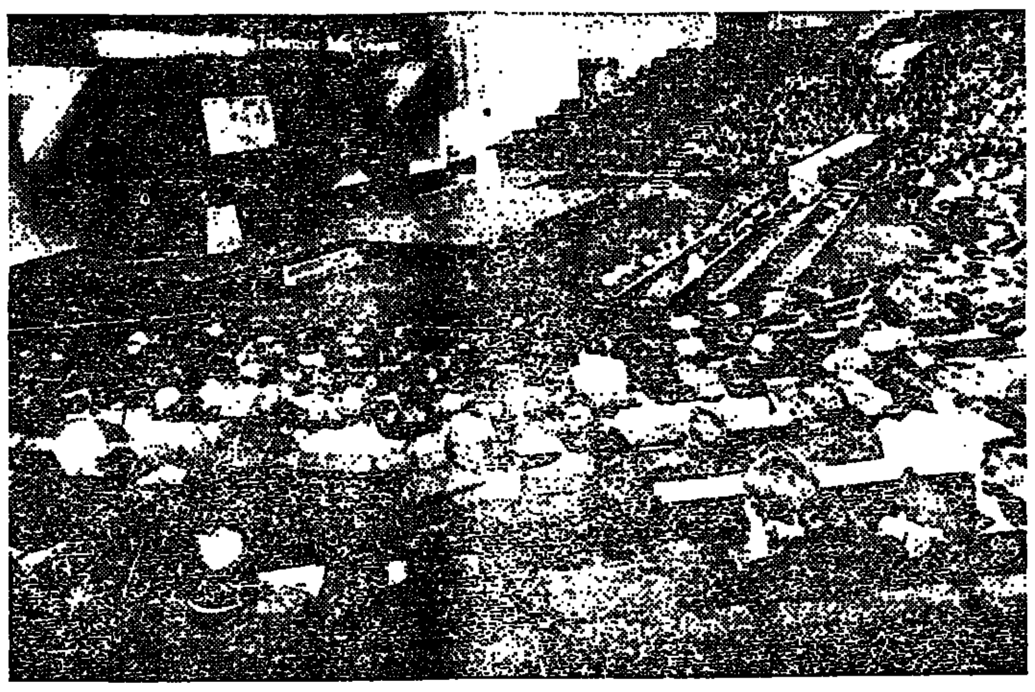
No one would doubt, nonetheless, that conferences and incentive travel are increasingly overlapping—much to the irritation of some tax authorities, notably the Americans. Conferences are frequently staged in exotic (Birmingham and London are exotic if you live in Los Angeles) locations partly because attendance at them will be treated as a special reward for many of the delegates. This is particularly the case of corporate conventions, with international companies placing a very strong emphasis on social events which attempt to create a global "family" atmosphere among employees who are normally separated by considerable distances and often considerable cultural differences.

But the need for personal contact is not confined to the international market. Domestically, too, organisations and companies whose operations are spread have a driving need for frequent gatherings.

Optimism

With the optimism that abounds in the industry at the moment ("There is plenty of business to be had. The more complicated the world becomes the greater the need for people to communicate," says Mr. Stan Fewster, director of the British Association of Conference Towns) it is not necessarily being churlish to ask if there are any concerns for the future. Naturally enough there are, but perhaps only small niggling doubts.

The first, naturally enough, revolves around the continued world recession. With the U.S. still not back to its eager-beaver attitudes of the sixties, and the stronger western economies apparently unwilling to take a major plunge into reflation, there is concern that the sort of recovery which would indeed provide boom conditions in the conference business is still some years away. However, convention traffic has been such recently as to suggest that even without full economic revival there will still be enough work to go round.



Wembley Conference Centre.

Perhaps more immediately worrying, particularly to those in the large scale long haul conference market, is the question of air fares. After those years of recession, during which period the airlines of the world have built up considerable surplus capacity, air fares are currently extremely low by the standards of a decade ago. When airlines talk of a round trip fare of less than £200 to Los Angeles from London this may be good news to the traveller, but it indicates an attitude close to sell-at-any-price on the part of the supplier.

Recently there have been signs of a wide revival in the air travel market. Already in Britain, for example, it is suggested that this summer will see the end of the short-haul air seat price war which has been so much a feature of the market. Once demand soaks up supply on the longer haul routes then it is likely that air fares will rise again somewhat faster than the average inflation rate of the nations they serve. At the moment the air content of some foreign convention packages is not necessarily a deterrent, but the conference business may have to learn to live with somewhat tougher demands from the airlines in three or four years' time.

Another continuing concern is the attitude of tax authorities, with rumours flowing about other countries possibly following the example of the Americans in taking a tough line towards conference spending. Broadly speaking American business people are allowed two foreign conferences a year; can only claim tax deductions on tourist class air travel; and must limit their deductions to the expenditure allowed by Washington for its own employees when they are travelling abroad. Since the last allowance in London was $49 a day in London (and less than $30 a day outside the capital) at the last count, and this sum has to include all spending not just hotels it is hardly surprising that American Government groups only seem to come for fleeting visits.

The impact on some destinations of this rule, introduced a little over a year ago, has been dramatic. The Canadians, who had sought special treatment, have been particularly hard hit. Until now perhaps many Americans had not realised that Canada was a foreign destination.

Elsewhere the impact has not been as severe as was feared (but ssh! in our eagerness to get the rules changed we are not supposed to admit that).

The rule does have its lighter side. Apparently the American taxman has declined to define what he is going to accept as proof of attendance at the conference for which tax deductions are being claimed. Each delegate must attend, and prove attendance, for a certain number of hours each day. I am assured that some Americans are seeking, and being supplied with, timed photographs of business sessions with their own hard working faces displayed well to the fore.

Although there is talk of the rules being relaxed, the fact that the dollar is anything but healthy at the moment, and that the American domestic convention business has a powerful lobby voice which wants to put as many obstacles as it can in the way of foreign competition, suggests that they may be with us for some time. Other countries might follow suit, although such uniformity would probably need a conference to exchange views.

Most people seem to agree that the negative influences over the conference business are currently outweighed by the positive ones and in the foreseeable future growth in traffic is likely to be the order of the day. Certainly as the conference business itself increases in sophistication, and conference centres offer more complete packages, then the attractiveness of conferences themselves increases. It is unlikely that the need for personal contact and exchange will diminish, whatever the advances in technology, and therefore the market would appear to be set for continued development.

This Report was written by Arthur Sandles

Battle of the cities

CLEARLY it is one thing to build a convention centre, it is quite another to fill it. If there is one thing that follows all the publicity material about "why Bloggsville needs a convention hall" as sure as night follows day, it is a mountain of advertising literature urging organisations to make their bookings. Convention centres may bring considerable benefits to a community, but they can also bring problems, not the least of them administrative and financial.

The rush to build convention halls worldwide has led to fierce rivalry between towns. The battle has no respect for boundaries. London, Paris and Hong Kong will all be in there fighting for the next meeting of the Atlanta Widgits League.

The greatest attraction, of course, is the amount of money that conference delegates spend and the fact that they are likely to spend it at otherwise quiet times of the year. Although it is true that this is the time when they are quoted the lowest room rates, it is also the case that conferences are rarely staged at a time when the delegates would otherwise be on holiday with their families. An average conference delegate spends much more than a tourist from the same country. London, largest conference destination in the world, earns something like £100m. a year from conference delegates.

The cities themselves are not alone in their fight for traffic, in this they have allies in the hotel groups, airlines, ground transportation interest and, of course, the convention centres themselves. In all these fields life has grown more aggressive over the years.

Time was when convention centres were thin on the ground. Largely an American idea the notion spread over the years. However, it was the development of mass air travel, and notably the introduction of the Boeing 707 jet in the late fifties, which revolutionised the business. Suddenly it became possible to cast the net wider, and thus to organise bigger conferences in more distant places. It was therefore in the sixties that the major modern meeting places started to come on stream, a rapid expansion in capacity which continued into the seventies and might now have slowed but still proceeds. Rotterdam, Hong Kong, Manila and Torremolinos all jumped on what promised to be a lucrative bandwagon. The huge McCormick exhibition and convention centre went up in Chicago and the National Exhibition Centre was planned for Birmingham, England.

The growth of supply in

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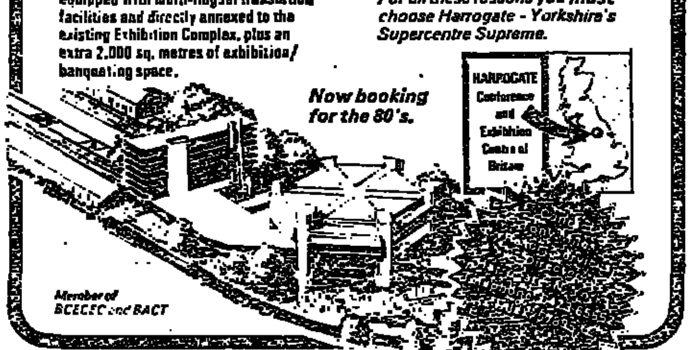


Britain's changing scene

ALTHOUGH central London is still without its modern purpose-built exhibition/convention centre (but better news of that later) several projects have been coming on stream recently. Wembley and Brighton are now *firmly established, as is the* National Exhibition Centre at Birmingham. Several other developments will be coming into fruition soon and, doubtless to the delight of those who feel that the South has had a lion's share of the traffic in the past, much of the expansion is coming from the north. Although the Barbican centre in London (with a capacity of 2,000) and that at Bognor Regis (550) will soon be in operation, it is projects such as Summerland in the Isle of Man (2,000), Blackpool (1,500) and Harrogate (2,000) which will be providing the bulk of the new facilities.

There is no question but that much of this new capacity was desperately needed. Many old conference halls have done sterling work, and will almost certainly continue to be used, but there has been an awful lot of creaking at the seams. While the conference halls themselves are serviceable enough for many uses, their lack of flexibility and poor services in such essential fields as catering and toilet arrangements have proved *an embarrassment at times.* It may have come as something of a culture shock to see union conferences, traditionally staged under chandeliers and surrounded by fading paintwork, held instead in *air-conditioned carpet-clad comfort*, but the adjustment is rapidly made.

Incentives

The new city conference centres have been added to a large stock of modern convention and exhibition facilities which sprung up in hotels as a result of the hotel building incentives scheme of a few years ago. Much has been said about the bedroom capacity that this scheme provided, but an extremely useful spin-off has been the provision of a considerable amount of small- to *medium-sized* conference space both in London and in provincial centres.

The total meetings business in Britain will probably be worth more than £300m. this year, although precise figures are difficult to find in this highly *fragmented business. For* some towns the market is of considerable consequence to both the local business community and the ratepayers. Brighton may have seen nearly £9m. on its new conference centre, but that is less than the annual spend of conference delegates in the seaside town anyway. This year Brighton reckons that spending will jump to £15m. or more. The average spend of a delegate in the town during a three and a half day stay is £90, which puts him in a much more attractive league than the normal run of day tripper.

Of course, investment in centres is not without ancillary worries. Birmingham may be proud and delighted with its new centre but it has raised some eyebrows with its increased rates and has been watching staffing levels in order to "become viable" next year and move into profit by 1983-84. *The NEC is having to work* hard for its business, but it is a spectacular piece of initiative which deserves success.

In this specialised field of large exhibition centres the NEC's main domestic rival is, of course, London and specifically Earls Court. The capital seems to have backed off from any thought of attempting competition with the NEC in the form of new building. One recent estimate of such an exercise put the cost of building a London exhibition centre from scratch at between £150m. and £200m. and acknowledged that this would take several years to complete.

Instead the London Convention Bureau floated the idea of Greater London Council investment in Earls Court renovation, an idea that seems to have delighted Town and City Properties, the exhibition centre's owners. The LCB pointed to Brighton's spending on its new facilities, talked of Harrogate spending £6m. and of Aberdeen investing £5m. It voiced its alarm in no uncertain tones: "The opening of the National Exhibition Centre in Birmingham provided a million square feet of excellent exhibition space, and effectively challenged London's long standing leadership in trade shows and exhibitions.

"Until then (1976) Earls Court and Olympia, which between them provide about the same floor area as Birmingham, had been Britain's prime sites; but within a year, five of London's biggest shows, including the Motor Show and Furniture Show, had moved to NEC—which also started to take other events from Brighton, Blackpool, Harrogate and elsewhere. The loss to Greater London of events of this nature is serious, and has underlined the problems of maintaining a competitive facility here to withstand the attraction not only of Birmingham, but of other new exhibition halls developing both in the U.K. and abroad."

What the LCB has suggested is that in addition to the £1m. which Town and City Properties itself is spending over the next three years, there should be a minimum GLC investment of £5m., "the *minimum* amount seen as necessary to make a worthwhile improvement." But the significant suggestion was that another £5m. should be spent in extending the Earls Court exhibition area by a further 100,000 square feet.

I understand that the GLC has reacted favourably that this campaign, of which the LCB remarks were but part, and that the announcement of some sort of GLC involvement in Earls Court is not now far away. Whether it will be anything like £10m., however, remains to be seen.

The Council must be encouraged by the optimistic words which are coming out of Wembley Conference Centre, the £14m. project which it was at one time popular to label as North London's White Elephant. Now Wembley says that its first year's figures are better than had been projected for the third year of operation.

"Figures for the year show that a total of over 300 events has been held in the Centre—one of which booked the whole building for 2½ weeks. Con*ferences were attended by* 350,000 visitors. It is estimated that approximately 45,000 of these delegates and visitors came from abroad and that they represented £6m. of invisible earnings (including hotels, shopping etc.). Some of these events they came to would have been held in other locations on the Continent if Wembley's new facilities had not been available. An estimated 700,000 cups of coffee and 750,000 meals were provided by Letheby and *Christopher*, the Wembley Complex caterers."

Even Wembley has discovered that one of the great attractions of London is the very fact that it is London. Whatever money *is spent* by rival destinations it is difficult to match the facilities of London's cultural and night life. This is why the capital has carved itself such a sizeable place in the international market.

One of the great demonstrations of this popularity came late last year with one of Britain's more interesting invasions — the several thousand Sweet Adeline barmony singers. It has been estimated that besides memories of their spectacular hairstyles and nipped-waisted, wide hemmed dressed, the Adelines left behind some $3m. which they spent while they were here.

The Adelines provided an in*dication of the sort of wor*k which any city has to do these days in order to get business of this magnitude. The London visit was originally negotiated five years ago and involved repeated journeys to the U.S. to finalise arrangements. Most conferences (were the Adelines in conference?) have a slightly shorter lead time than this, but two-three years is not unusual *for a 2,000-plus internationa*l meeting.

Whether the capital will see the like again is doubtful. This year we have to make do with the International Gas Turbine conference in April, followed by the Sixth World Conference of Retailers and, to cap it all, an international gathering of the Salvation Army. Well, at least we would not be short of song.

The Hamburg Congress Centre.

The professionals take over

ONE OF THE most impressive changes that has come over the conference business in recent years is the spread of professionalism. To-day another ex*ample of the way in which the* business is progressing can be seen at London's Royal Lancaster Hotel when the Association of Conference Executives has a sort of busmen's break by opening a two-day conference *on conferences*—as usual the event has been given a trendy label, Contact 78.

The conference itself is heavy on the show-biz glitter (William Rushton, Gayle Hunnicutt among others) which should lead to some lively sessions, but the subject areas of the workshop discussions serve to indicate just what it is that worries conference planners today: Are incentives stimulators or just tax-dodges? Are conference buyers treated like poor relations who only fill off-season space? Are "purpose built" conference centres built for any particular purpose? And who needs all the razzmatazz of stage productions and audio-visual aids?

In fact these subject headings indicate the sort of complexity that the conference organiser faces to-day should he be new to the game. He quite often feels he needs assistance but finds so much of it offered, at a price, that he can emerge as confused as when he started. It is hardly surprising therefore that ACE itself is showing *signs of increasing popularity*, and increasing demands on its services as a central point for the exchange of ideas.

The trouble with describing the need for professional help in so many conferences is that much of the evidence sounds obvious. Nonetheless, it seems that many a pitfall is no less deep for being visible a long way off. For example, a major failing of the inexperienced conference organiser (and, dare I say it, of some experienced) is to try to pack too much into *the programme.* The advantage of such a ploy is that it looks good on paper. It may help to sell tickets and will probably impress the boss, at least in anticipation. The event is likely to be less impressive.

Few things irritate an audience more than a convention which runs late, which leaves little or no time for floor discussion, and above all which cuts meal and cocktail time down to nothing because the sessions are all over-running.

Surprising

I enjoyed the doubtful honour on one occasion last year of speaking (very, very briefly) to an audience of a handful in a hall which an hour earlier had held 2,000 people. A couple of other speakers suffered the same fate since we actually rose to our feet after 1.15 in the afternoon. By then everyone had gone to lunch. The chairman seemed not to have noticed.

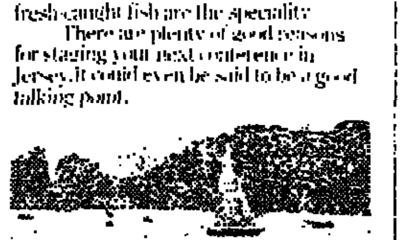
It is surprising how many conferences have inadequate audio-visual systems, uncomfortable chairs and chairmen have been chosen for their position in society rather than their ability in the chair. One of the great advantages of an outsider is that they are *allowed* occasionally to tread unwarily through office politics, choosing speakers for their ability and subjects for their relevance rather than for some other mystic purpose.

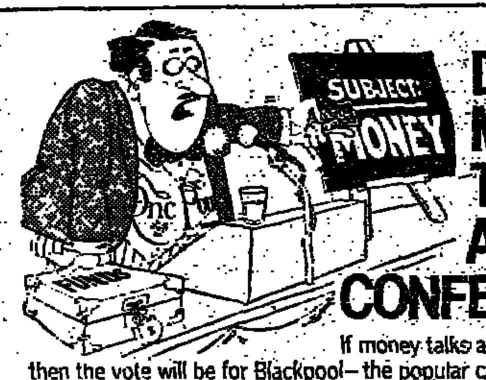
For many organisations the annual conference is the single most important event of the year, and yet so often it is completed with something of a nasty taste being left in a few mouths. Sessions among the organising committee after a conference can often be more *lively than those before it were.*

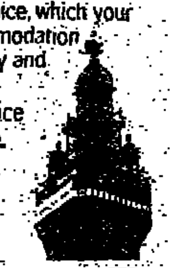
Clearly, however, there is a considerable eagerness to pick up tips. The ACE gathering will be almost sold out (could there be a more critical audience?) and there is an increasing supply of information on conference techniques and technology.

The demand is present because more and more companies and organisations realise that conference organisation is *increasingly a specialised art.* This does not necessarily mean that more of them are buying in expertise. Such is the frequency that larger bodies are called upon to involve themselves in conferences both *large and small that more and* more of them are making conference organisation a specialis' activity within the company.

The firm that only a few years ago delegated travel to a junior secretary and let the youngest clerk organise conferences, now probably boasts both a travel manager and a conference organiser.







Days in the country

T ONLY the larger hotel groups which vered that there is for conference facili- ıaller independent ı many of the coun- ties of the larger ve found there is a ed for pleasant, often accommodation for erings. The growth rket in recent years spectacular as the ık" philosophy has creasingly companies hotels, particularly perties, for week-end lving exercises.

country hotel, of e development has re than welcome nany of them have catering for the small is not necessarily the simple spin off that might be expected. The small corporate conference frequently involves personnel who are well used to very high standards of accommodation and catering. Money is not usually the major obstacle, but the hotels in question must have fully equipped rooms, pleasant meeting facilities, and a restaurant of a very high standard indeed. Often the hotels involved are those that find their way into such elegant listings as the Relais de Campagne and the British Tourist Authority Commended Hotels.

The dilemma for the country hotel which gets involved in this sort of business is often that of numbers. Just as a hotel with 500 rooms can easily be swamped by a convention with 300 delegates, so a conference of only 15 people can quickly take control of a property with say 30 rooms. Couples who have sought out their own quiet country retreat are not particularly enthused by brandy-drinking, late-night groups that can easily emerge from even a small gathering. The conference people themselves too, often do not wish to stand out among the visiting crowd, preferring instead to mix with the normal hotel guests.

Marketing

The marketing of this sort of operation is a slow, if finally rewarding, business. Some of the larger operations which have carved themselves a name for the retreat-type of gathering, such as the Selsdon Park Hotel near London, can run to modest advertising campaigns. For most, on the other hand, it is a matter of cultivating personal contact.

Since the man who makes the final decision is going to end up bringing his closest business colleagues and their wives along to meetings he is likely to take some care in making the final decision. But that decision, when taken, has every chance of being a long-term one. Small conference business tends to be extremely loyal. A good country hotel operation can find itself with a list of companies who hold meetings for 10-20 people as often as monthly, and also use the hotel for small, intensive training courses. It does mean being willing to offer rooms in the peak season as well as the winter, but the investment is very worth while.

One type of accommodation which also tends to be in pleasant surroundings and does not suffer from the difficulty of wanting to turn away convention business in high summer is within the universities. Turning over the campus to holiday and conference business is a relatively recent development, but has proved very popular. The advantages are that the as far as the conference itself is concerned. The disadvantages that very often the student accommodation is not quite what many conference delegates have come to know and love. Too many of us these days feel a strong need for a room with colour television and telephone.

It was only in 1970 that the universities got together on anything like a formal basis. At the time there were only 12 of them in a modestly run consortium which attempted to deal with a demand which was increasing almost without any promotional work being done. To-day there are more than three times as many members spread geographically from Aberdeen to Southampton and able to handle meetings of a considerable range in both size and nature.

Revenue this year will probably easily exceed £6m. Biggest of the on-site university halls is that at Edinburgh (Pollock) with 1952 seats, but at Leicester there is accommodation of marginally greater capacity close by. Most universities can deal with conferences of several hundred delegates with ease. One of the benefits that they offer is extensive public areas and the frequent provision of numerous ancillary rooms to the main conference areas which can be used for more intensive workshop purposes.

Another beneficiary from the "away from it all" desire is Ireland. A country hotel for a conference is an attraction enough, but a country hotel in Ireland seems to add another dimension to the game. The Irish, in a current campaign to further increase tourism from Britain, are placing particular stress on the Republic's conference facilities. My own love, the Irish west, has an impressive array of accommodation and, if you like that sort of thing, you might be pleasantly surprised at how many recently built fully equipped modern hotels there are in the area.

The trouble with Ireland is the additional temptations. Whatever else you are a long way away from, you are never very far from fishing, golf, horseback riding and those amazing village pubs. It's all a bit distracting if you are trying to get on with some business, but, after all isn't a conference meant to inform, entertain and also relax you?

Even greater escape can be had, of course, by chartering a ship. Most shipping lines are activly involved in the convention business, willing to sell part as well as full charters. It is not always realised that cruise companies are often quite keen to sell space at special rates, particularly in the shoulder months, to convention organisers.

Like the small hotel, no company particularly wants a convention which is of such size as to disturb the life of the rest of the passengers, but even quite large gatherings can be interrupted unless the organiser is determined that everyone should wear large badges or even corporate uniforms. I was recently on a cruise where a large section of the passengers were a religious group conferring (needless to say they were Americans). The only irritation was that since their rules did not apparently ban either drinking or dancing it was extremely difficult to tell who was a conventioner and who was not.

The more ambitious can always rent the QE 2 or the Canberra for a week or so — at least you know that the delegates or employees cannot actually leave in the middle of things.

The real growth market, however, is in more modest affairs, with getting away meaning simply country air, country food and a chance to talk in a relaxing environment. It is a business which is attracting an increasing amount of interest.

Cities

CONTINUED FROM PAGE ONE

modern facilities has probably now reached the stage where, in a buyers market, the consumer is very much in a position to ask for rather more than just be latest in seating and audio-visual systems—and most buyers do indeed seek more.

Increasingly, as a result, the city convention bureau is of paramount importance in securing the business. This is simply because the convention bureau tends to act not only as an initial stimulant to choice—making the sales pitch that produces the first inquiry—but also as a co-ordinating centre throughout the planning of the conference or exhibition itself. Not least this is because a large conference will be seeking all manner of fringe benefits as a result of bestowing its custom on a city. In its crudest sense this will involve seeking a direct subsidy from the city itself, but more often in quoting a base price per delegate and asking the city to ensure that everything can be provided for that price.

Obviously this involves a considerable amount of co-ordinating work. A typical international conference might say that for $40 a day it wants the conference facilities, coffee, meals, road transfers to and from hotels, a couple of cocktail parties and a night at the theatre. How the city fixes all that within the price allocation is a matter for long sessions between the various parties involved and the convention bureau—the conference organiser, who may be 10,000 miles away and "organising" the event in his spare time anyway, is in no position to become directly involved in the arguments.

Frequently, of course, some of the bill is picked up by organisations eager to impress the delegates. Thus I have been dined (with several hundred others) by General Motors at a motor industry gathering, lunched by Disney at a travel congress (this time the total was 2,000) and offered refreshment by Rank at Cannes.

In many industries there are numerous companies for whom the cost of providing food is a tiny price to pay for the opportunity to make a sales pitch to what is probably a highly influential group of prospective customers. Unfortunately for some conference organisers, not every profession is prepared to involve itself in such blatant commercialism. This particularly applies to medical conferences. The medical world is notoriously unwilling to sell even its meal and cocktail breaks to commercial sponsors —"your caviare to-day ladies and gentlemen was by courtesy of *nockemout* sleeping pills who will now show you a short film." Nor is it very keen to have exhibitions allied to its conferences, another favourite way of generating cash.

In cases such as this the convention bureau might attempt to enlist local counterparts of a professional organisation to play some form of hosting role.

Some cities, notably resort areas in the off-season, will pay heavily for custom, not only subsidising the convention directly but also indirectly by providing city services, such as buses, for nothing.

Tickets

Fortunately this is the sort of game that the larger cities, like London and Paris, do not have to involve themselves in. Nonetheless the flat-rate principal very much applies since organisers have got to quote a basic price to their members or other delegates, and sometimes do this more than a year in advance. What the cities do become involved in is the negotiation of bulk rate purchase of theatre and sporting event tickets and of visitor books which contain discount cards for various local attractions and activities.

In spite of all this rivalry it is surprising how friendly the major cities of the world are. The convention bureau heads all seem to know each other very well and be willing, occasionally, to pass business around. This is not quite as stupid as it sounds. An international conference that goes to Hong Kong, for example, in 1978, is unlikely to pick the same part of the world in 1979 and therefore Rotterdam, Helsinki or Harrogate are much more prominent candidates. Thus a sort of convention mafioso builds up which ensures that a conference is not allowed to slip out of the circuit.

First seen from the outside it is an impressively high-powered and sophisticated marketing world, one of fierce competition perhaps, but also one with a degree of olde world gentility —not that anyone is beneath spreading a ·mour or two about a rival's inflation rate, or rain record.

OVERSEAS MARKETS

EUROBONDS

BY MARY CAMPBELL

Dollar decline sets the pace

THE EUROBOND market reacted to last week's re-acceleration of the dollar's fall on the foreign exchange markets in a manner which is now only too familiar: dollar bonds fell, ending the first sustained sign of a stabilisation in this sector since the autumn, while D-mark and Swiss franc bonds in particular romped ahead.

The dollar fell to DM2.0617½ last Friday, down from DM2.1080 a week earlier, and to Sw.Frs.1.8860 (1.9505). Among Swiss franc foreign bonds, the recent Citicorp issue ended the week at 105¾, up from 105 a week earlier (though this was perhaps a particularly strong performance). Norsk Industribank, the latest issue to start trading, was quoted on Friday at 102¼—it had been priced at par.

In the D-mark sector, trading on Friday was described as "hectic." Recent bond issues were bid well up to and above their issue price.

In the Yen sector, three issues announced last week included a large Y50bn. (about $210m.) offering for Australia which marks a new low point for yields. However, the higher yields on the Finland and Oslo offerings announced subsequently suggest that this was more a tribute to Australia's special popularity with investors than an indication of a general trend.

In the D-mark sector, the final terms on issues priced last week confirm a further erosion of yield levels. The New Zealand offering was priced at 100¼ despite having a DM50m. increase and a one-year extension of the maturity since it was originally due for scheduling a month ago. The most spectacular change was in the Fujitsu convertible, which started trading at a premium of about three points despite a last minute coupon cut by half a point to 4½ per cent. This new 4½ per cent. coupon level was reaffirmed in Friday's announcement of a new Japanese convertible, for Nisshin Steel.

The 5¼ per cent. coupon scheduled on the EIB's issue is the lowest yet for its maturity: the World Bank paid 5¾ per cent. at 99 to yield 5.86 on the twelve year bond (average life 10½ years) which was priced only three weeks ago.

Due for announcement later to-day is the DM200m. offering for Venezuela for which WestLB will be lead manager.

In the dollar sector only $55m. worth of straight bonds remain on offer, although the European Investment Bank has field a two tranche $200m. issue in New York via Merrill Lynch. One $100m. tranche is due in 1998 and the other in 1995.

The main surprise continues to be the lack of new borrowers wanting to take advantage of the current strength of the floating rate note market. The one bond on offer, announced over the week-end, is scheduled to be placed solely via a Far East consortium. The rate will be tied to a quarter point above the Singapore offered rate—Asian issues and loans are usually priced on the London inter-bank rate, which tends to be lower than the Singapore rate.

In the dollar secondary market, the main developments of the week were the sharp falls in Massey Ferguson and Reed bonds, in the one case following the passing of the dividend on the preference as well as ordinary stock and in the other due to fears over Reed's Canadian operations.

The only issue to start trading was New Zealand Forest Products which opened firmly at 99 bid. Dealers did not, however, expect this heartening performance to be extended to the two bonds which start trading to-day.

Experience in the sterling sector was mixed last week, as the fears of a resumption of the trade deficit even sooner than pessimists expected were renewed with the announcement of a deficit for January. However, Samuel Montagu took advantage of a rally in the sterling/dollar rate on Friday to bring out one of the issues which have been rumoured for several weeks, Allied Breweries. (The borrower is technically called Financiering Maatschappij d'Oranjeboom.)

The 10¼ per cent. indicated on the bonds and indicated pricing of "at or around par" make the terms identical with Rowntree Mackintosh and Sears, both of which were bid at a discount of about 1½ points on Friday.

Although the final maturity is somewhat longer than on these other two recent British corporate issues, the average life is marginally shorter due to the operation of a sinking fund which starts in 1982.

On the basis of the average life, the closest comparable gilt-edged issue, the 7¾ per cent. due 1988, is yielding 10.19 per cent. The Treasury 13 per cent. of 1990, however yields 11.66 per cent.

BONDTRADE INDEX AND YIELD

	February 17		February 10		1978 High	1978 Low
Medium term	99.76	7.83	99.79	7.84	99.81 (13/2)	99.34 (13/1)
Long term	93.66	8.35	93.65	8.35	93.84 (2/1)	93.05 (14/1)

Note: The index of convertible bonds has been discontinued.

EUROBOND TURNOVER
(nominal value in $m.)

	U.S. dollar bonds last week	U.S. dollar bonds previous week	Other bonds last week	Other bonds previous week
Euroclear	948.9	964.9	373.5	321.4
Cedel	341.5	283.8	389.4	171.4

CURRENT EUROBOND ISSUES

Borrowers	Amount m.	Maturity	Av. life years	Coupon %	Price	Lead manager	Offer yield %
U.S. DOLLARS							
‡NZ Forest Products	25	1986	¶	9	100	Kidder Peabody, LBI	9.00
‡Avco Overseas Cap. Corp.	25	1985	6	9¼	100	Kidder Peabody	9.25
‡Hitachi Zosen (g'teed Sanwa Bank)	30	1983	5	8¼	99½	Nomura, S. G. Warburg	
‡**ECSC	20	1990	8¼	8¼	99	Soc. Gen. de Banque, Salomon	
Jutland Fünen Elec. (ELSAM)	25	1985	7	9	*	Blyth Eastman Dillon	
†Nippon Credit Bank	20	1983	5	6‖	*	Daiwa	
D-MARKS							
‡§Fujitsu	50	1986	—	4½	100	Deutsche	
‡Norcem	50	1985	7	5¾	100	Deutsche	
‡New Zealand	250	1986	8	5¾	100¼	Commerzbank	
**Escom	25	1981	3	6½	*	Dresdner	
BNDE	150	1986	6.5	6½	*	Commerzbank	
**GIS	40	1983	4½	6	*	Bayerische Landesbank	
**S. Af. Broadcasting (g'teed S. Africa)	20	1981	3	8	100	Bayerische Vereinsbank, Dean Witter	
EIB	200	1989	9.9	5¼	*	Deutsche	
§Nisshin Steel	50	1986	—	4½	100	Commerzbank	
SWISS FRANCS							
‡F. L. Smidth	25	1989	n.a.	4½	100	Swiss Bank Corp.	
‡New Zealand	120	1993	n.a.	3¾	99	UBS	
‡Holmens Bruk	30	1993	n.a.	4½	99	Banque Scand. en Suisse	
‡**New Zealand	180	1983	n.a.	3½	100	Swiss Bank Corp.	
‡Oest. Donaukraftwerke (g'teed Austria)	100	1993	n.a.	3¾	99½	Crédit Suisse	
Imatran Voima	80	1993	n.a.	4	*	Crédit Suisse	
YEN							
‡Australia	50bn.	1990	10.32	6.6	99.30	Nomura	
‡Oslo	15bn.	1989	9.06	6.6	99.10	Nikko	
‡Finland	25bn.	1988	9.00	6.7	100	Yamaichi	
STERLING							
Allied Breweries	15	1989	9.9	10¼	*	Samuel Montagu	
GUILDERS							
Denmark	100	1993	n.a.	7¾	*	Algemene Bank	
KUWAITI DINARS							
SAMIR (g'teed Morocco)	7	1983/8	—	8½	100	BAII, KIIC	

* Not yet priced ‡ Final Terms ** Placement † Floating rate note ‖ Minimum ¶ Purchase fund § Convertible Note: Yields are calculated on AIBD basis.

Paribas Canada seeks stake in Power Corpn.

By Robert Gibbens

MONTREAL, Feb. 19.

PARIBAS PARTICIPATIONS, wholly owned by the French Paribas banking group (controlled in turn by Compagnie Financiere de Paris et des Pays Bas), may take an equity stake in Power Corporation of Canada, the Montreal based holding company which owns Consolidated Bathurst, Investors Group and other financial interests and publications.

Indices

NEW YORK—DOW JONES

	Feb. 17	Feb. 16	Feb. 15	Feb. 14	Feb. 13	Feb. 10	1977-78 High	1977-78 Low	Since compilat'n High	Since compilat'n Low
Industrial	752.69	755.29	761.69	765.16	774.48	775.98	999.75 (3/1/77)	752.69 (17/2/78)	1051.70 (11/1/73)	41.22 (2/7/32)
H'me B'nds*	89.35	89.54	89.61	89.64	89.77	89.79	95.87 (7/9)	88.55 (26/1/78)	—	—
Transport	205.84	205.50	206.59	207.98	209.88	212.85	246.64 (13/5)	199.60 (25/10)	279.88 (7/2/69)	13.23 (8/7/32)
Utilities	105.52	105.55	105.96	104.53	104.97	105.65	118.67 (22/2/77)	103.52 (17/2/78)	163.32 (20/4/69)	10.58 (28/4/42)
Trading vol. 000's †	18,500	21,570	20,170	20,470	16,810	19,490	—	—	—	—

* Basis of index changed from August 24.

	Feb. 10	Feb. 3	Jan. 27	Year ago (approx.)
Ind. div. yield %	5.94	5.98	6.02	4.46

STANDARD AND POORS

	Feb. 17	Feb. 16	Feb. 15	Feb. 14	Feb. 13	Feb. 10	1977-78 High	1977-78 Low	Since Compilat'n High	Since Compilat'n Low
‡Industrials	96.81	98.94	97.75	98.81	98.91	99.12	118.92 (3/1/77)	96.81 (17/2/78)	134.64 (11/1/73)	3.52 (30/6/32)
§Composite	87.86	88.08	88.88	89.04	89.86	88.98	107.00 (3/1/77)	87.86 (17/2/78)	125.85 (11/1/73)	4.40 (1/6/32)

	Feb. 15	Feb. 8	Feb. 1	Year ago (approx.)
Ind. div. yield %	5.33	5.17	5.22	3.97
Ind. P/E Ratio	8.57	8.77	8.69	10.94
Long Govt. Bond yield	8.26	8.20	8.16	7.66

N.Y.S.E. ALL COMMON

Feb. 17	Feb. 16	Feb. 15	Feb. 14	1977/78 High	1977/78 Low
48.90	48.94	48.54	49.47	57.07 (4/1/77)	48.90 (17/2/78)

Rises and Falls

	Feb. 17	Feb. 16	Feb. 15
Issues traded	1,813	1,848	1,806
Rises	656	369	479
Falls	676	1,040	834
Unchanged	481	439	493
New Highs	—	17	15
New Lows	—	105	69

MONTREAL	Feb. 17	Feb. 16	Feb. 15	Feb. 14	1977-78 High	1977-78 Low
Industrial	165.68	162.90	165.72	164.87	168.47 (17/3)	158.02 (25/10)
Combined	172.42	171.74	172.76	173.49	187.95 (19/1/77)	165.50 (25/10)
TORONTO Composite	1007.7	1002.6	1006.8	1010.5	1067.4 (19/7)	961.0 (25/10)
JOHANNESBURG Gold	210.7	211.6	215.1	212.7	218.7 (1/2/78)	158.4 (24/5)
Industrials	209.1	207.3	208.2	208.9	214.4 (4/1/78)	169.1 (22/4)

	Feb. 17	Previous	1977-78 High	1977-78 Low
Australia (¶)	463.65	462.26	479.45 (3/1/78)	418.18 (16/2/77)
Belgium (‖)	94.05	93.87	99.12 (15/1/77)	90.48 (12/1/78)
Denmark (**)	96.81	96.22	107.92 (9/6)	94.00 (6/2/78)
France (††)	52.1	51.1	58.4 (7/1/77)	45.5 (10/6)
Germany (‡‡)	809.1	811.1	815.5 (17/11)	712.5 (10/6)
Holland (§§)	80.6	80.9	93.2 (4/5)	75.6 (29/9)
Hong Kong (¶¶)	—	457.30	425.17 (11/6)	323.44 (13/1/78)
Italy (‖‖)	62.58	62.02	76.71 (6/1/77)	54.90 (22/12)
Japan (a)	381.87	384.60	390.93 (23/9)	360.49 (24/11)
Singapore (b)	270.28	271.81	271.68 (15/2/78)	242.26 (3/6)
Spain (d)	93.05	93.12	100.00 (30/12)	93.05 (17/2)
Sweden (e)	359.75	361.59	416.02 (22/2)	286.06 (24/11)
Switzerl'd (f)	320.1	322.4	323.7 (14/2/78)	280.5 (5/5)

Indices and base dates (all base values 100 except NYSE All Common — 50 Standards and Poors — 10 and Toronto 300-1,000, the last named based on 1975). † Excluding bonds. ‡ 400 Industrials. § 400 Inds., 40 Utilities, 40 Finance and 20 Transport. (¶) Sydney All Ord. (‖) Belgian SE 31/12/63. (**) Copenhagen SE 1/1/73. (††) Paris Bourse 1961. (‡‡) Commerzbank Dec., 1953. (§§) Amsterdam Industrial 1970. (¶¶) Hang Seng Bank 31/7/64. (‖‖) Milan 2/1/73. (a) Tokyo New SE 4/1/68. (b) Straits Times 1966. (c) Close. (d) Madrid SE 30/12/77—high and low for 1978 only. (e) Stockholm Industrial 1/1/58. (f) Swiss Bank Corp. (u) Unavailable.

OVERSEAS SHARE INFORMATION

Inv. $ Prem. at $2.60 to £—81½% (80¾%)
Effective rate (at 1.9450) 35¾% (34¾%)

NEW YORK

1977-78 High	1977-78 Low	Stock	Feb. 17
56½	39	Abbots Labs.	51⅝
15⅝	10⅛	Addressograph	15¼
38¼	28½	Aetna Life & Cas	35¼
34⅞	21½	Air Products	24
43⅝	26⅛	Airco	38¾
23¼	22⅛	Alcan Aluminium	22½
59¼	38⅞	Alcoa	39¼
36⅝	17	Allegheny Ludl.	19⅝
22¼	19¼	Allegheny Power	19¼
50⅞	34¼	Allied Chemical	35⅝
23¾	19	Allied Stores	19
33¾	22¼	Allis Chalmers	24⅝
59⅝	32⅝	AMAX	32¾
37⅛	23⅜	Amerada Hess	23⅜
14⅝	8⅛	Amer. Airlines	9½
48	39½	Amer. Brands	43⅞
47⅛	34⅝	Amer. Broadc'st.	36⅜
41¾	35⅜	Amer. Can	36¼
29⅛	23⅜	Amer. Cyanamid	24¾
25⅝	23	Amer. Elec. Pow.	23⅛
41⅝	32	Amer. Express	32¼
51¾	25½	Amer. Home Prod	27¾
20	11⅛	Amer. Medical	16¾
5⅛	3⅝	Amer. Motors	4⅛
47¼	39¾	Amer. Nat. Gas	41
37	25¾	Amer. Standard	36
36⅛	27½	Amer. Stores	28¾
69⅜	57½	Amer. Tel. & Tel.	60⅜
35	27	Ametek	28¾
25⅛	15⅜	AMF	16¼
30⅝	24¼	AMP	24¾
12⅝	7⅝	Ampex	12⅝
32¼	26¼	Anchor Hocking	26⅞
30½	18½	Anheuser Busch	18¾
32½	19⅞	Armco Steel	26¾
23¾	17½	A.S.A.	20⅛
19¾	8	Asamera Oil	8½
23⅝	13⅛	Asarco	16⅛
37⅛	27¼	Ashland Oil	27¼
61¾	44¾	Atl. Richfield	44¾
30½	21½	Auto Data Pro.	24⅛
12⅛	8¾	AVC	10
19½	13	Avco	17⅞
51¾	44	Avon Products	44¾
39⅞	24⅞	Balt Gas Elect.	26
39⅞	20⅞	Bank America	21¼
41¼	34	Bankers Tr. N.Y.	34¾
59⅜	26	Barber Oil	26
40¼	28½	Baxter Travenol	34
28½	22	Beatrice Food	23⅜
40½	25⅞	Becton Dickenson	37⅝
26⅞	14	Bell & Howell	17¼
47	33	Bendix	43⅞
5½	1⅞	Benguet Cons 'B'	2⅞
39⅛	18⅜	Bethlehem Steel	20½
20¼	14½	Black & Decker	15
30⅜	19⅛	Boeing	29⅛
33¼	22⅜	Boise Cascade	23¾
36⅛	28⅞	Borden	29⅝
33⅜	25¼	Borg Warner	26⅜
11⅛	7⅜	Braniff Int.	10
14¼	10⅞	Brascan 'A'	13⅜
35⅝	28¾	Bristol Myers	30⅝
16¾	13⅝	Brit. Pet. ADR	14⅝
35⅞	26⅜	Brockway Glass	27⅜
17¼	11⅛	Brunswick	14⅝
27	16⅜	Bucyrus Erie	16½
34⅞	18¾	Budd	32¼
8¼	5	Bulova Watch	5½
52¾	37	Burlington Nthn	37⅝
90¾	55¼	Burroughs	60⅛
39⅜	31¾	Campbell Soup	32¼
18½	14¾	Canadian Pacific	15⅛
12½	8	Canal Randolph	10¼
78⅛	27⅝	Carnation	28¼
15	11¾	Carrier & General	12⅛
21¾	16⅛	Carter Hawley	16¼
59⅝	48¾	Caterpillar Tractor	49⅝
62	43⅜	CBS	43⅝
52¾	37⅜	Celanese Corpn.	38¾
17¾	14¾	Central & S.W.	15½
28⅛	19⅜	Certainteed	21½
34	26⅞	Cessna Aircraft	31⅞
34¾	27½	Chase Manhattan	27⅞
47	38⅝	Chemical Bk. NY	38⅞
26¼	20¼	Cheseb'gh Pond	20½
42½	31⅝	Chessie System	32¾
63⅜	42	Chicago Bridge	43¼
17½	14⅜	Chromalloy	16¾
21¾	12½	Chrysler	12½
2⅞	1¾	Cinerama	2½
21⅝	15	Cine. Milacron	19
34	19⅝	Citicorp	19½
62½	46⅜	Cities Service	46⅝
16⅛	11⅝	City Investing	12½
80¼	35¼	Coca Cola	36⅛
27½	19⅜	Colgate Palm	20
13	10⅛	Collins Aikman	11
36⅞	27⅝	Columbia Gas	27⅞
20½	7¾	Columbia Pict.	15⅜
17½	13⅝	Com. Ins. Co. of Am.	15½
40⅞	28	Combustion Eng.	32¼
30¼	13¾	Combustion Eq.	15⅜
32⅛	27⅜	C'm'w'th Edison	27⅜
8⅝	2⅜	Com'w'th Oil Ref	2½
37	28¾	Comm. Satellite	32½
9⅝	6¾	Computer Science	8¾
25¼	19⅛	Conrac	19⅛
25½	22	Con. Edison N.Y.	22⅞
26⅞	25	Consol Foods	25⅝
47	35¼	Consol Nat. Gas	35¼
25½	21⅞	Consumer Power	22⅝
37¼	30½	Continental Grp.	30⅞
34⅝	26½	Continental Oil	27½
17¼	14⅝	Continental Tele.	15
28¾	19½	Control Data	23⅜
49¼	38⅝	Cooper Indus.	41¾
70⅝	46	Corning Glass	46½
54⅞	42¼	CPC Int'n'tional	44⅜
35⅞	24¾	Crane	26½
29	22⅞	Crocker Nat.	24⅝
45	29¾	Crown Zellerbach	29¾
68⅜	31⅝	Cummins Engine	32
19⅜	13⅝	Curt-Wright	17
29⅝	22⅛	Dana	22⅝
38⅞	30⅛	Dart Industries	36⅜
33⅛	23⅝	Deere	23½
29½	22¾	Del Monte	25
7⅛	4⅛	Deltona	5⅜
30⅜	17	Dentsply Inter.	17¼
17⅞	16⅛	Detroit Edison	16⅝
38⅝	26½	Diamond Shamrk	27¼
13¼	10	Dictaphone	12
52¾	38⅛	Digital Equip.	39¾
47	32⅛	Disney (Walt)	33¼
43¾	35	Dover Corpn.	40
42¾	23⅝	Dow Chemical	23⅜
47⅛	37⅝	Dresser	39⅛
134¾	104¾	Du Pont	105⅛
14⅛	9⅞	Dymo Industries	13⅝
22	16⅞	Eagle Picher	17
9⅜	5⅛	East Airlines	6⅝
85⅜	43¼	Eastman Kodak	43½
46⅝	33	Eaton	34⅜
21¼	16	E.G. & G.	19½
19⅞	14¾	El Paso Nat. Gas	15¼
31⅝	22⅞	Eltra	28
36	30	Emerson Electric	30½
43¼	33	Emery Air Fr'ght	38¾
41	28¼	Emhart	29¼
4¼	3	E.M.I.	3⅝
36¾	22¾	Engelhard	23
35	25⅜	Esmark	26
22¾	18½	Ethyl	19⅝
55	43½	Exxon	44⅛
40⅛	21⅝	Fairchild Camera	25⅞
48½	33¼	Fed. Dept. Stores	35⅛
33⅜	14⅜	Firestone Tire	14½
30	23⅞	Fst. Nat. Boston	24⅞
20¼	11	Flexi Van	17
23	17⅛	Flintkote	20½
34⅛	29	Florida Power	30½
43	31⅞	Fluor	32
22⅝	20⅜	F.M.C.	20⅝
47	40½	Ford Motor	41¾
19	15	Foremost Mck.	17½
36	27⅜	Foxboro	30⅛
29¼	7¼	Franklin Mint	7¾
30⅞	17⅞	Freeport Mineral	18⅞
31½	24⅝	Fruehauf	25½
12¾	7¾	Fuqua Industries	9¾
13⅝	9⅜	G.A.F.	11
40¾	32½	Gannett	35⅞
12¼	9	Gen. Amer. Int.	9⅜
34	24½	G.A.T.X.	24⅞
14⅝	10⅜	Gen. Cable	12¾
61⅛	38¾	Gen. Dynamics	38¾
57⅛	45⅛	Gen. Electric	45
35¾	26⅞	General Foods	26⅞
34⅜	26¼	General Mills	27⅞
77	57⅜	General Motors	57⅜
21⅝	18⅜	Gen. Pub. Util.	19⅛
29½	25⅛	Gen. Signal	25⅝
33¼	28¼	Gen. Tel. Elect.	28⅜
29⅞	22⅛	Gen. Tyre	23⅜
6½	3½	Genesco	5⅝
37¾	24	Georgia Pacific	24
211½	148	Getty Oil	152¾
30½	23⅜	Gillette	24⅞
33½	18⅞	Goodrich B.F.	19⅛
23¾	16½	Goodyear Tire	16½
34⅝	26	Gould	27½
51⅜	21⅞	Grace W.R.	24⅞
14¾	7⅜	Gt. Atlan Pac Tea	8⅛
34½	19¾	Grt. North Iron	25⅞
15⅝	12⅛	Greyhound	13⅛
18⅛	10⅛	Gulf & Western	11½
30⅜	24¼	Gulf Oil	24¼
67	54¾	Halliburton	58⅛
54½	35½	Hanna Mining	38½
23¾	15	Harnischfeger	15⅛
46⅝	28	Harris Corpn.	42¾
36½	28⅞	Heinz H.J.	36
42⅛	22	Heublein	26⅞
86⅝	64	Hewlett Packard	64⅛
16	11⅜	Holiday Inns	15⅛
43⅜	33⅜	Homestake	33¾
54⅜	42⅞	Honeywell	43¼
13⅝	11¼	Hoover	11¾
29⅞	21¾	Hosp. Corp. Amer	24¾
35⅛	23⅝	Houston Nat. Gas	24½
17⅛	10	Hunt (Ph.A.) Chm	10
17¾	11⅜	Hutton (E.F.)	11⅜
27⅛	21⅜	I.C. Industries	24⅛
47¾	35½	INA	35½
78	52¾	Ingersoll Rand	54½
52	35⅜	Inland Steel	34
16½	12¾	Insilco	15
13¾	7	Intercont Energy	7½
285¼	245¼	IBM	255⅜
25½	18⅜	Intl. Flavours	20⅛
37¾	26¼	Intl. Harvester	27⅜
43¾	35¼	Intl. Min & Chem	38⅞
23¼	17⅛	Intl. Multifoods	20⅞
34	14½	Inco	14¼
69⅜	36⅞	Intl. Paper	37½
40½	22½	IPC	27⅞
10	5	Intl. Rectifier	10
36¼	27¾	Intl. Tel. & Tel.	27⅜
2⅞	¾	Invest	1¼
31⅞	20	Iowa Beef	29½
14¼	11	IU International	11⅛
39¼	25⅛	Jim Walter	28
38⅛	27¾	Johns Manville	30⅛
77¼	62⅝	Johnson Johnson	66¾
30⅝	21½	Johnson Control	28⅝
49	29¾	Joy Manufactur'g	31
40⅛	22⅝	K.Mart Corp.	23¾
39¾	27¾	Kaiser Aluminium	28
18⅞	4¼	Kaiser Industries	4¾
35	20½	Kaiser Steel	22
8⅝	4⅛	Kay	7⅝
30⅞	18⅝	Kennecott	22
73¾	40¼	Kerr McGee	40¼
30⅛	23¼	Kidde Walter	27¾
48	37⅛	Kimberley Clark	42⅞
26	20	Koppers	20⅛
50⅞	42	Kraft	43
28⅝	23	Kroger Co.	26⅞
31⅜	25	Levi Strauss	28¾
36⅞	25⅝	Libby Ow. Food	27¼
35½	26⅝	Liggett Group	27½
47¼	33	Lilly (Eli)	38¾
15⅝	11¼	Litton Indust	14¼
18½	9	Lockheed Aircr'ft	13¾
23¾	16¾	Lone Star Inds.	18
20⅜	17⅞	Long Island Ltd.	18½
31½	20⅜	Louisiana Land	20½
37⅛	30¼	Lubrizol	34½
16⅝	13	Lucky Stores	13¼
13⅞	5	L'kes Y'ngst'wn	5⅞
11⅞	7⅞	MacMillan	10⅜
39¾	31⅝	Macy R.H.	35⅝
41	29¾	Mfrs Hanover	29¾
47	33	Mapco	35⅜
58⅛	41⅝	Marathon Oil	41⅝
14½	10⅝	Marine Midland	13⅛
34⅛	17¼	Marshall Field	29⅝
31⅞	21¾	May Dept. Stores	21⅞
44	31¾	MCA	32⅜
29¼	21¾	McDermott	24⅜
27¼	19⅜	McDonnell Doug.	22¾
19¾	15⅞	McGraw Hill	17¾
34½	24	Memorex	26⅞
67⅞	50⅜	Merck	53¼
25	13⅝	Merrill Lynch	14¼
47	31	Mesa Petroleum	36
28⅜	16	MGM	26½
67	45⅜	Minn Ming & Mtg	46
70⅝	58⅝	Mobil Corp.	68⅝
68⅝	47⅝	Monsanto	47⅝
66	39⅝	Morgan J.P.	39¾
55¾	33¾	Motorola	36⅛
39¼	23	Murphy Oil	34½
55⅞	46	Nabisco	49⅞
34⅜	24⅞	Nalco Chemical	26⅞
16⅜	12¼	National Can	15⅜
25¾	20¼	Nat. Distillers	21¼
15⅜	12½	Nat. Service Ind.	13⅛
45½	30	National Steel	30¼
44¾	31½	Natomas	36
46¾	32⅛	NCR	40⅛
21¾	12¼	Neptune Imp.	14
24⅝	21¼	New England El.	22⅜
36⅛	31⅝	New England Tel	34⅞
17¼	14⅜	Niagara Mohawk	14⅞
13	9½	Niagara Share	9½
23⅝	15⅝	N.L. Industries	15⅝
36¾	25¼	Norfolk & Western	26⅝
48¼	35⅜	North Nat. Gas	35⅜
30½	25	Nthn States Pwr	25½
30½	19½	Nthwest Airlines	23¼
56¾	21⅝	Nthwest Bancorp	22½
21⅝	17	Norton Simon	17¾
31	20	Occidental Petrol	21½
41¾	31	Ogilvy Mather	37¾
21½	18⅜	Ohio Edison	18¾
22	15¾	Olin	15¾
33⅛	21⅛	Overseas Ship.	21⅞
73⅛	58¾	Owens Corning	58¾
29¼	20⅜	Owens Illinois	21½
25⅝	22½	Pacific Gas	24
21⅛	18¼	Pacific Lighting	19¾
24	20⅝	Pac. Pwr. & Lt.	20⅝
6⅛	4	Pan Am World Air	5
28¾	21	Parker Hannifin	22¾
27⅞	19¼	Peabody Int.	20½
24½	20½	Pen. Pw. & Lt.	22½
52⅝	32¼	Penney J.C.	34¼
35½	26¼	Pennzoil	29¾
11⅛	7½	Peoples Drug	7½
39½	32⅜	Peoples Gas	33⅛
28½	22½	Pepsico	25
21⅞	16⅝	Perkin Elmer	17½
38½	29½	Pet	36¾
28¾	24	Pfizer	26½
39⅞	18⅝	Phelps Dodge	18⅝
21	17⅜	Philadelphia Ele.	19¼
64⅜	51½	Philip Morris	56⅛
68⅛	27	Phillips Petrol'm	28¼
44½	35½	Pillsbury	37½
31¼	15¼	Pitney Bowes	18¼
36½	21¼	Pittston	24
20½	10¼	Plessey Ltd ADR	16⅞
38½	23½	Polaroid	24⅝
16½	13¼	Potomac Elec.	15⅜
39⅞	23½	PPG Industries	23½
93	74⅛	Procter Gamble	77¾
26	21⅜	Pub. Serve Elect.	22⅜
35⅝	24	Pullman	25¼
19½	15⅛	Purex	16¾
26⅜	20⅜	Quaker Oats	21½
6¾	4⅝	Rapid American	6⅞
65½	28	Raytheon	30⅞
32⅛	22¾	RCA	24⅛
34⅝	21¾	Republic Steel	23
45⅞	36⅛	Revlon	41
44⅝	26	Reynolds Metals	26
70⅝	52¼	Reynolds R.J.	54⅝
26¼	18⅞	Rich'son Merrell	20½
36⅝	27⅞	Rockwell Inter.	30⅛
51½	28⅜	Rohm & Haas	29¼
61	51⅝	Royal Dutch	55⅞
15⅝	9⅛	RTE	15¼
14⅛	10⅛	Russ Togs	11⅝
18	12⅞	Ryder System	13⅜
50⅜	36¾	Safeway Stores	36¾
43⅛	26½	St. Joe Minerals	26⅛
38⅝	27⅛	St. Regis Paper	27½
42⅝	34½	Santa Fe Inds.	34½
5	3½	San. Invest.	4⅛
6½	3¾	Saxon Inds.	5
18	10½	Schlitz Brewing	12⅞
74	56⅜	Schlumberger	66¾
25	16⅝	SCM	16⅝
20⅝	13	Scott Paper	15
23¼	18⅜	Scovil Mfg.	20¾
8	6	Scudr' Duor Vest	6⅜
29⅜	12⅝	Sea Containers	20½
24	19¼	Seagram	21¼
13⅝	10⅞	Searle (G.D.)	12½
34	24½	Sears Roebuck	24⅜
41½	28	SEDCO	32⅛
36½	28¼	Shell Oil	29⅛
44⅛	30½	Shell Transport	38¼
34¾	24	Signal	28⅜
40	34¼	Signode Corp.	34¼
16½	10⅝	Simplicity Pat.	11
25⅜	18½	Singer	18½
50¼	32	Smith Kline	47½
3¼	1¾	Solitron	1¾
24⅝	13¼	Southdown	24⅝
27	21⅝	Southern Cal. Ed.	26½
18	15⅞	Southern Co.	16¾
54	28	Sthn. Nat. Res.	29⅛
38	31¼	Southern Pacific	32¾
62¾	46⅛	Southern Railway	47
27¼	20½	Southland	23⅛
27	20½	S'w't Banshares	24
20⅜	15½	Sperry Hutch.	15¾
43	29⅝	Sperry Rand	33¾
29⅞	21⅝	Squibb	23
30¾	24¼	Standard Brands	25⅝
45	34⅝	Std. Oil California	37½
57¾	44	Std. Oil Indiana	46½
91	63¾	Std. Oil Ohio	67¼
49⅞	31½	Stauff Chemical	36¼
16⅝	15⅛	Sterling Drug	15⅝
51	37	Studebaker	51
48	36¼	Sun Co.	36¼
42¼	31¾	Sundstrand	33
24¼	16¼	Syntex	32¼
12¾	5¼	Technicolor	8½
40	28¼	Tektronix	33¾
75⅞	47¾	Teledyne	71½
3⅞	2	Telex	3¼
37⅛	28¼	Tenneco	29⅜
17¼	6	Tesoro Petroleum	9⅜
30⅜	25½	Texaco	25½
31⅝	16¾	Texasgulf	16¾
99⅜	65⅞	Texas Instm.	66¾
34½	22⅝	Texas Oil & Gas	29¾
22¾	18⅞	Texas Utilities	19⅝
39½	31¾	Time Inc.	35¾
25¾	20	Times Mirror	22¼
55¼	43¾	Timken	45⅜
41⅛	31⅛	Trane	35
16¾	13¼	Transamerica	13⅛
23½	17	Transco	19
38⅜	32¼	Trans Union	35½
27¾	21	Transway Int'rnl	23⅛
12⅞	7⅞	Trans World Air	12⅛
36½	26½	Travellers	28⅛
22⅝	16⅜	Tri Continental	16⅝
40¼	27¾	T.R.W.	31⅛
26	10	20th Century Fox	21¾
27⅜	18⅞	UAL	19⅞
22⅜	18	UARCO	21
25⅛	17⅛	UGI	23
18	13¾	UOP	14¾
43¼	27¼	Unilever	37⅜
56	47½	Unilever NV	54⅜
13½	11	Union Bancorp	13
62	38	Union Carbide	38
9	6½	Union Commerce	6⅝
59	45⅝	Union Oil Calif.	47⅝
58	41	Union Pacific	42¼
11⅛	7½	Uniroyal	7¾
10	6⅝	United Brands	7⅛
11⅛	10	United Corp.	[illegible]
32⅛	25½	US Bancorp	27¾
26¼	21⅛	US Gypsum	22⅝
26⅜	18¼	US Shoe	21½
49⅜	25½	US Steel	25½
41	32⅛	U. Technologies	34
39¼	17¾	UV Industries	18½
15¼	14	Virginia Elect.	[illegible]
18⅝	15	Walgreen	18⅜
44	35⅛	Warner Commun.	35
51⅜	24⅛	Warner Lambert	26
19⅝	13⅛	Waste Man'ment	19½
26⅞	24¼	Wells Fargo	25
55¾	25⅝	Western Bancorp	30⅛
27⅜	14½	Western N. Amer	24⅝
20½	16	Western Union	16¼
23⅛	16½	Westinghouse Elec.	17½
33⅝	24	[illegible]	24⅝
46⅝	21¾	Weyerhaeuser	21⅜
27½	20½	Whirlpool	21
28	19½	White Con. Ind.	20¾
25¼	17⅞	William Co.	17⅞
32¼	27¼	Wisconsin Elect.	27⅝
25⅝	17⅝	Woolworth	17⅞
2¼	¾	Wyly	[illegible]
57⅝	43⅞	Xerox	44⅞
18¾	10½	Zapata	16
26⅞	13	Zenith Radio	13
98⅝	92⅝	U.S. Treas 4% 1980	†94
86	†81⅜	U.S. Treas 4¾% 75/85	†81¾
6.54%	4.38%	U.S. 90 Day bills	6.42%

CANADA

1977-78 High	1977-78 Low	Stock	Feb. 17
11½	8¾	Abitibi Paper	11⅛
8	5.55	Agnico Eagle	6
30⅝	23⅜	Alcan Aluminium	25⅛
19½	13⅞	Algoma Steel	16⅜
42½	19¾	Asbestos	38¼
18¼	13⅜	Bank of Montreal	18⅛
22½	17½	Bank Nova Scotia	19½
10⅝	5	Basic Resources	6½
56½	43⅜	Bell Telephone	53⅛
24¼	16⅜	Bow Valley Inds.	21⅛
17¾	8¾	BP Canada	14¾
15⅝	11⅛	Brascan	15⅛
5.0	1.68	Brinco	†3.25
38	31½	Calgary Power	35½
17¼	8¾	Camflo Mines	15¾
10	7⅝	Canada Cement	[illegible]
14¾	6	Canada NW Land	10⅜
25¾	21¾	Can Imp Bank Com	25⅝
20½	17¼	Canada Indust.	†20
19⅝	16⅛	Can. Pacific	16⅞
19¾	16¼	Can. Pacific Inv.	18
59⅜	39¾	Can. Super Oil	52½
3.60	2.31	Carling O'Keefe	3.30
9¾	5¾	Cassiar Asbestos	9
21¾	8⅛	Chieftain	19½
38¼	25	Cominco	26½
29¼	19½	Cons Bathurst	23
17½	13⅞	Consumer Gas	15¼
8¼	4.15	Coseka Resources	6⅞
8¾	†6⅛	Costain Rich.	9¼
61½	45⅜	Denison Mines	58¼
78¾	42¾	Dome Mines	77
69⅞	38	Dome Petroleum	66
24¼	17	Dominion Bridge	20⅝
15¾	12⅞	Domtar	14⅞
15⅛	11¾	Dupont	13
39½	16⅝	Falcon'ge Nickel	17¼
95	70	Ford Motor Can.	72
27¾	22⅜	Genstar	25⅞
13⅞	5½	Giant Yel'wknife	†13½
30¼	23¾	Gulf Oil Canada	27
6⅝	4.50	Hawker Sid. Can	5¾
33¼	27½	Hollinger	†29½
47⅜	26½	Home Oil 'A'	39⅝
19⅝	14	Hudson Bay Mng	16½
19	14⅛	Hudson Bay	17⅝
46½	33⅜	Hudson Oil & Gas	42½
18¾	15	I.A.C.	17¼
30¾	24	Imasco	†30½
23¾	18¼	Imperial Oil	18¾
34⅛	15⅞	Inco	16⅛
10⅛	6⅛	Indal	10½
16¼	9	Inland Nat. Gas	10¼
18⅞	12⅝	Int'pr'v Pipe Line	14
15⅝	12¾	Kaiser Resources	14
8	6⅛	Laurn't Fin Corp	7
4.15	2.61	Loblaw Com. 'B'	3.50
25	16⅜	McM'll'n Bloed	16¼
24⅛	10½	Massey Ferguson	10⅝
39½	21	McIntyre	21
37	26½	Moore Corpn.	31½
33⅞	19⅝	Noranda Mines	23½
18⅞	10½	Norcen Energy	15⅝
35	25	Nthn. Telecom	†27⅞
16½	10½	Numac Oil & Gas	16¼
6⅝	1.90	Oakwood Petr'm	5.00
3.10	0.95	Pacific Copper M	2.15
43¾	26¾	Pacific Petroleum	35¾
36	18¼	Pan. Can. Pet'm	32½
20	†13	Patino	†15½
7⅛	4.00	Peoples Dept. S.	4.10
1.43	0.40	Place Gas & Oil	0.86
23⅜	17⅛	Placer Developmt	19⅝
10⅝	7⅜	Power Corporat'n	[illegible]
11½	8⅜	Price	11¼
1.54	0.62	Quebec Sturgeon	1.50
31	14¼	Ranger Oil	18⅝
10	6¾	Reed Shaw	8⅝
38	24⅝	Rio Algom	26½
23⅝	23½	Royal Bk. of Can.	27⅝
16⅝	14¾	Royal Trust	16
24½	20¾	Seagrams	23⅝
17½	13½	Shell Canada	15½
6½	4.05	Sherritt G. Mines	3.55
31⅞	15½	Simpson	31
5¾	4.20	Steinberg	4.55
26½	23⅜	Steel of Canada	23⅞
3.0	1.75	Steep Rock Iron	[illegible]
41⅝	24⅛	Texaco Canada	21
19½	16	Toronto Dom. Bk.	17¼
16⅝	14¼	TransCan PipeLn	14⅝
12⅛	8½	Trans Mount Oil	9⅝
13¼	9¼	Trizec	11¾
15⅛	8⅞	Union Gas	11⅛
8⅞	5¾	Utd. Siscoe Mines	7¼
31	22	Walker Hiram	31
35⅝	26¼	West Coast Trs	32¾
15	9⅝	Weston Geo.	15

* Assented. † Bid. ‡ Asked. § Traded ¶ New stock.

GERMANY ◆

Feb. 17	Price Dm.	+ or −	Div. %	Yld. %
AEG	91.7	−0.3	—	—
Allianz Versich.	494	−1	18	1.8
BMW	232.5	−0.5	20	4.4
BASF	139.9	−0.5	17	6.0
Bayer	140.5	−0.4	16	5.7
Bayer. Hypo.	290	−0.5	20	3.4
Bayer. Vereinsbk	320	......	20	3.1
Ciba Int. Ned. wrts	226	+6	—	—
Commerzbank	227.5	−0.2	18	3.2
Conti Gummi	79	−0.3	—	—
Daimler Benz	312.5	−3	19	3.1
Degussa	273	−1	17	3.1
Demag	164	−0.2	14	4.3
Deutsche Bank	310.5	−1.1	20	3.2
Dresdner Bank	251	−0.4	20	4.0
Dyckerhoff Zemt	145.5	−4.5	4	1.4
Gutehoffnung	218	−1.5	12	2.7
Hapag Lloyd	113.5	......	12	5.2
Harpener	251	+5	9	3.6
Hoechst	129.4	−1.1	16	6.2
Hoesch	44.6	−0.2	4	4.4
Horten	118.5	+0.5	10	4.2
Kali und Salz	155	−0.5	9	2.9
Karstadt	296	......	20	3.3
Kaufhof	207	+5	20	4.8
Klockner Dm 100	93.8	−1.7	—	—
KHD	179.5	−0.5	12	6.2
Krupp	98.2	−0.8	—	—
Linde	242	−2.5	16	3.3
Lowenbrau 100	1,560	......	20	1.2
Lufthansa	112	......	7	3.1
MAN	200	−2	12	3.0
Mannesmann	174.5	−0.2	14	4.0
Metallges.	250.5	−0.4	10	2.2
Munchener Rueck.	540	......	18	1.7
Neckermann	114	+0.5	—	—
Preussag Dm 100	110	−2.5	7	6.4
Rhein West Elect.	211.5	+1.7	16	3.8
Schering	260	−2	20	3.8
Siemens	298.8	+0.8	16	2.7
Sud Zucker	250	......	17	3.4
Thyssen A.G.	124.4	−0.1	11	4.4
Varta	178	−0.8	14	3.9
VEBA	118	......	12	5.1
Verein & West Bk.	299	......	20	3.3
Volkswagen	209.5	−1	10	2.4

JOHANNESBURG

MINES

February 17	Rand	+ or −
Anglo American Corpn.	5.90	−0.03
Charter Consolidated	3.85	−0.05
East Driefontein	12.00	
Elsburg	2.55	−0.05
Harmony	7.15	
Kinross	6.35	
Kloof	8.95	
Rustenburg Platinum	1.63	−0.07
St. Helena	13.90	−0.10
Southvaal	9.00	
Gold Fields SA	21.25	−0.20
Union Corporation	5.03	+0.03
De Beers Deferred	5.56	+0.01
Blyvooruitzicht	†5.50	−0.45
East Rand Pty.	6.50	
Free State Geduld	26.00	
President Brand	17.00	−0.35
President Steyn	13.00	−0.10
Stilfontein	4.75	−0.05
Welkom	4.50	+0.10
West Driefontein	‡34.50	
Western Holdings	30.50	+0.50
Western Deep	12.75	−0.25

INDUSTRIALS

February 17	Rand	+ or −
AECI	2.15	
Anglo-Amer. Industrial	8.60	−0.10
Barlow Rand	3.50	−0.05
CNA Investments	1.25	
Currie Finance	0.63	+0.03
De Beers Industrial	8.80	
Edgars Consolidated Inv.	1.70	−0.02
Edgars Stores	‡21.00	
EverReady SA	†1.65	
Federale Volksbeleggings	1.59	
Greatermans Stores	2.80	+0.05
Guardian Assurance (SA)	1.62	
Hulletts	2.10	
LTA	†1.70	
McCarthy Rodway	0.60	+0.02
NedBank	2.27	+0.02
OK Bazaars	5.55	
Premier Milling	‡6.40	+0.10
Pretoria Cement	‡3.35	
Protea Holdings	1.06	+0.03
Rembrandt Group	3.15	−0.05
Retco	0.38	
Sage Holdings	†1.40	
C. G. Smith Sugar	7.00	
Sorec	0.58	
SA Breweries	1.14	−0.02
Tiger Oats and Natl. Mlg.	8.95	−0.05
Unisec	1.08	−0.04

Securities Rand $U.S.0.78¼
(Discount of 31.7%)

AUSTRALIA

Feb. 17	Aust. $	+ or −
ACMIL (25 cent)	†0.76	......
Acrow Australia	†0.84	......
Allied Mnt-Trdg. Indus $1	†2.28	+0.5
Ampol Exploration	†1.26	+0.01
Ampol Petroleum	†0.73	+0.02
Assoc. Minerals	†1.70	......
Assoc. Pulp Paper $1	†1.10	......
Assoc. Con. Industries	†1.57	−0.05
Aust. Foundation Invest.	†1.06	−0.02
A.N.I.	†1.47	+0.01
Audimco	†0.47	......
Aust. Oil & Gas	†0.52	+0.4
Blue Metal Ind.	†0.96	+0.01
Bougainville Copper	†1.5	−0.1
Broken Hill Proprietary	†6.40	+0.14
BH South	†0.90	−0.02
Carlton United Brewery	†1.65	......
C. J. Coles	†1.88	......
CSR ($1)	†2.80	......
Cons. Goldfields Aus.	†2.45	......
Container ($1)	†2.05	......
Conzinc Riotinto	†2.00	......
Costain Australia	†1.40	......
Dunlop Rubber ($1)	†1.52	......
ESCOR	†1.00	......
Elder Smith	†1.90	......
E.Z. Industries	†1.85	......
Gen. Property Trust	†1.56	......
Hamersley	†2.26	......
Hooker	†0.73	......
I.C.I. Australia	†2.05	......
Inter-Copper	†0.29	......
Jennings Industries	†1.25	−0.03
Jones (David)	†1.01	......
Lennard Oil	†0.28	......
Metals Exploration	†0.15	......
MIM Holdings	†1.65	−0.2
Myer Emporium	†1.85	......
News	†2.35	......
Nicholas International	†0.65	−0.01
North Broken H'dings (50c)	†1.08	......
Oakbridge	†1.88	+0.07
Oil Search	†0.08	......
Otter Exploration	†0.17	......
Pioneer Concrete	†1.48	+0.04
Reckitt & Colman	†2.62	+0.02
H. C. Sleigh	†0.79	−0.02
Southland Mining	†0.20	......
Tooth ($1)	†1.67	+0.01
Waltons	†0.95	−0.01
Western Mining (50 cents)	†1.13	......
Woolworths	†1.67	+0.01

PARIS

Feb. 17	Price Frs.	+ or −
Rente 4½	771	−10
Afrique Occid'tle	320	+11
Air Liquide	247.9	+3.9
Aquitaine	515.1	−5.9
BIC	494	+13
Bouygues	368	+8
B.S.N. Gervais	346	−4
Carrefour	1,285	+25
C.G.E.	289	+5
C.I.T. Alcatel	840	+28
Cie Bancaire	251xc	+6
Club Mediter.	331	+9.1
Credit Com Fr'ce	106	......
Creusot Loire	62	+2
Dumez	452	+7
Fr. Petroles	99.6	+0.6
Gen. Occidentale	178.0	......
Imetal	51	+0.1
Jacques Borel	69	+3
Lafarge	141.5	+3.5
L'Oreal	539	+6
Legrand	1,255	+15
Mai'ons Phenix	711	+48
Michelin "B"	1,085	+30
Moet Hennessy	361	+11
Moulinex	135.5	−1.5
Paribas	150	+5
Pechiney	76	+1.1
Pernod-Ricard	209	+4.5
Peugeot-Citroen	265.1	+1.6
Poclain	105	+8
Radio Technique	340	−10
Redoute	472.5	+7.5
Rhone Poulenc	63.5	+0.5
St. Gobain	126.5	+2.1
Skis Rossignol	1,659	−20
Suez	218.2	+4.3
Telemecanique	543	+3
Thomson Brandt	139.5	+3
Usinor	19.1	+0.6

VIENNA

Feb. 17	Price %	+ or −	Div. %
Creditanstalt	350	......	10
Perlmooser	260	−1	9
Selecta	572	−2	48
Semperit	90	......	—
Steyr Daimler	196	......	7
Veit Magnesit	255	−1	14

BRAZIL

Feb. 17	Price Cruz	+ or −
Acesita	1.26	+0.05
Banco Brazil BP	2.54	+0.14
BelgoMineira OP	1.78	......
Docas OP	1.25	−0.05
Lojas Amer. OP	3.20	......
Petrobras PP	3.60	+0.02
Pirelli OP	2.10	+0.04
Souza Cruz OP	3.95	......
Vale Rio Doce PP	1.68	−0.06
Unip EP	5.90	−0.02

Vol. Cr.178.0m. Shares 70.6m.
Source: Rio de Janeiro SE.

OSLO

Feb. 17	Price Kroner	+ or −	Div. %
Bergen Bank	95	......	9
Borregaard	57.50	−1.75	4
Creditbank	106xd	......	11
Kosmos	315.0	+2.5	20
Kreditkassen	105.5	+1.5	11
Norsk Hydro kr. 80	185.5	+0.5	12
Storebrand	87.5	......	9

SPAIN ♥

February 17	Per cent.
Asland	104.5
Banco Bilbao	255
Banco Atlantico (1,000)	283
Banco Central	322
Banco Exterior	276
Banco General	266
Banco Granada (1,000)	155
Banco Hispano	293
Banco Ind. Cat. (1,000)	167
B. Ind. Mediterraneo	182
Banco Popular	211
Banco Santander (250)	326
Banco Urquijo (1,000)	229
Banco Vizcaya	292
Banco Zaragozano	308
Bankunion	136
Banus Andalucia	252
Babcock Wilcox	30.5
CIC	112
Dragados	218
E. I. Aragonesas	52.25
Espanola Zinc	101
Expl. Rio Tinto	100.25
Fecsa (1,000)	67
Fenosa (1,000)	60
Gal. Preciados	55
Grupo Velazquez (400)	165
Hidrola	70.75
Iberduero	82
Inmobanif	114
Olarra	71
Papeleras Reunidas	57
Petroliber	134
Petroleos	174
Sarrio Papalera	65
Sniace	39.5
Sogefisa	125
Telefonica	85.5
Torras Hostench	108
Tubacex	78
Union Elec.	66

SINGAPORE

Feb. 17	$	Feb. 17	$
Industrials		Straits Trad'g	5.80
Boris	0.63	Times Pub.	
Boustead Co.	2.13	Berhad	2.88
Boustead Bhd	1.60	U. Engineers	1.40
Dunlop	4.24	U. Ov's. Bk.	2.82
Esso	2.54	Wearne	2.38
Fraser Neave	5.58	Tractor	3.52
Haw Par	0.89½	Chemical	4.00
Hume Ind.	1.86	Wllm Jacks.	1.08
Inchcape	1.95	Rubbers	
Jardine	1.92	Batu Lintang	1.67
Malay Brew.	4.80	Dunl'pEstate	3.00
Malay Cemt.	2.36		
Mal. Tobacco	6.95	Kempas	3.90
Met. Bx. Sing	2.30		
Ov'sChin. Bk	5.85	Tins	
Pan Electric	1.73	Austral. Am.	—
Robinson Co.	2.20	Berjuntai	7.45
Rothmans	3.70	Kamper	†2.90
Shell	2.13	Kramat	
Sime Darby	3.30	Kuchai	10.8
Cold Storage	1.96	Lower Perak	131.8
Straits Steam.	2.30	Petaling Tin	8.70
Straits Times (1975) Ltd.	—	Supreme Cp.	2.30
		Tongkah Har.	2.80

† Buyer. ‡ Seller. — Unquoted. xd Ex dividend.

AMSTERDAM

Feb. 17	Price Fls.	+ or −	Div. %	Yld. %
Ahold (Fl. 20)	110.8	−0.2	24	4.8
Akzo (Fl. 20)	22.5	+0.1	—	—
Alg'mBnk (Fl.100)	345	+2.5	A22.5	6.5
AMEV (Fl.10)	80.1	−0.3	A44	5.5
Amrobank (Fl.20)	71.4	+0.9	22½	6.6
Bijenkorf	82	−0.8	26	5.6
BokaWe'st'm (Fl10)	119.7	−0.4	70	5.6
Buhrm Tetterode	67	+0.6	25	7.5
Elsevier (Fl. 20)	275	+5	121	1.8
EnniaN.V.Bearer	138.9	+0.4	52.5	4.1
EuroComT. (Fl. 10)	62.0	......	54.6	5.6
Gist Brocades (Fl0)	37.5	+0.2	22	5.9
Heineken (Fl. 25)	105.3	+0.2	14	3.3
Hoogovens (Fl20)	25	+0.1	10.2	8.2
Hunter D. (F. 100)	23.2	+0.2	12	5.4
I.H.C. Holland	14.4	......	10	6.9
KLM (Fl 100)	125.8	−3	—	—
Int Muller (120)	36.5	−1.2	16	9.9
Naarden (Fl10)	38	−0.8	10	2.6
Nat Nedlnd (Fl.10)	108.3	−1.2	46.2	4.3
Ned Cred Bk (Fl20)	54.6	−0.7	20	7.3
Ned Mid Bk (Fl50)	191	−0.5	20	5.5
Oce (Fl 20)	158	−1.5	434	4.3
van Ommeren	138.7	−1.3	8	5.7
Pakhoed (Fl. 20)	41.5	......	31	10.1
Philips (Fl. 10)	25.5	......	21	6.3
RijnSchVer (Fl100)	64.1	+0.4	16	—
Robeco (Fl. 50)	163.5	−1.2	A25.6	7.8
Rolinco (Fl. 50)	115.2	−0.8	—	—
Rorento (Fl. 50)	129.8	+0.1	14	5.4
Royal Dutch (Fl20)	124.5	−0.1	A50	8.0
Slavenburg	241.2	+0.5	19	7.9
StevinGrp (Fl. 20)	137.5	−2	47½	5.9
TokyoPac Hlds $1	95.0	......	30	0.7
Unilever (Fl. 20)	121.4	+0.1	A	6.9
Viking Res. Int. $1	40.5	−0.7	20	1.2
West'land'u. Bank	425.5	−4.5	32	3.7

COPENHAGEN ✚

Feb. 17	Price Kroner	+ or −	Div. %	Yld %
Andelsbanken	141½	+¼	11	7.8
Burm'str W. a/s	432	−1¼	15	3.5
Danske Bank	154	+3¼	11	8.2
East Asiatic Co.	250¾	+¾	12	5.1
Finansbanken	116	......	16	11.2
For. Bryggerier	326	+2½	13	3.7
For. Papir	74	−½	8	10.7
Handelsbank	134½	+1	12	8.2
G.N'th'n H. (Kr80)	256½	+½	12	4.2
Nord Kabel	268½	+½	12	4.5
Oliefabrik	87½	+1½	—	—
Privatbank	137¼	+1	11	7.9
Provinsbank	143¼	+¼	11	7.7
Soph. Berendsen	372	......	12	3.2
Superfos	182¼	+1¼	12	6.6

STOCKHOLM

Feb. 17	Price Krone	+ or −	Div. Kr.	Yld. %
AGA Ab (Kr.50)	187	−3	6.5	2.9
Alfa Laval B (Kr50)	168	......	5	3.0
ASEA (Kr.50)	87	−2	5	5.7
Atlas Copco (Kr25)	115	−1	6	5.2
Billerud	79.5	......	46.8	6.5
Bofors	123	−1	4	3.2
Cardo	188xc	+8	12	2.9
Cellulosa	208	−6	10	4.8
Elect'lux 'B' (Kr50)	132	−1	5.5	4.2
Ericsson 'B' (Kr50)	148	+2	6	4.3
Esselte 'B'	235	+2	8	3.4
Fagersta	94	+1	8	8.5
Granges (free)	49.5	......	—	—
Handelsbanken	290	+1	14.27	5.2
Marabou	120	......	8	6.7
Mo Och Domsjo	65	......	6.5	10.0
Sandvik A.B.	318	+5	5.05	2.3
S.K.F. 'B' Kr.	70	−1	4.5	6.4
Skand Enskilda	131	−1	8	6.0
Tandstik 'B' Kr50	83.5	−1	5	6.0
Uddeholm	43	−2	—	—
Volvo (Kr. 50)	73	+2	6	8.2

BRUSSELS/LUXEMBOURG

Feb. 17	Price Frs.	+ or −	Div. Frs. Net	Yld. %
Arbed	2,350	+10	—	—
Bq. Brx. Lamb.	1,434	+4	60	4.2
Bekaert "B"	1,735	−5	112	6.5
C.B.R. Cement	1,153	+2	90	7.8
Cockerill	368	+4	—	—
EBES	2,30	+5	177	7.7
Electrobel	6,020	−20	430	7.2
Fabrique Nat.	2,430	−30	170	7.0
G.B. Inno-Bm	1,900	−3	133	5.8
Gevaert	1,234	+4	80	5.5
Hoboken	2,650	+25	150	5.8
Intercom	1,805	......	142	7.9
Kredietbank	6,90	+20	265	3.8
La Royale Belge	5,195	+10	305	3.9
Pan Holding	2,4 0	......	52.5	2.5
Petrofina	4,035	−10	18.	4.4
Soc. Gen. Banque	2,95	+5	189	6.5
Soc. Gen. Belgique	1,965	+5	140	7.1
Sofina	3,10	−10	215	6.7
Solvay	2,485	−10	A240	6.0
Traction Elect.	2,610	+65	162	6.2
UCB	946	......	—	—
Un Min. (1/10)	712	−28	60	5.5
Vieille Montagne	1,324	−26	100	7.6

TOKYO ¶

Feb. 17	Prices Yen	+ or −	Div. %	Yld. %
Asahi Glass	318	......	14	2.2
Canon	442	−17	12	1.4
Casio	585	−19	25	2.1
Chinon	361	−9	20	2.8
Dai Nippon Print	514	+1	18	1.8
Fuji Photo	530	−12	15	1.4
Hitachi	210	−6	12	2.9
Honda Motors	569	−7	18	1.6
House Food	1,180	−10	35	1.6
C. Itoh	220	......	12	2.7
Ito-Yokado	1,260	+10	30	1.2
Jaccs	656	+9	13	1.0
J.A.L.	2,710	−20	—	—
Kansai Elect. Pw.	1,130	−10	10	4.9
Komatsu	321	−9	18	2.8
Kubota	281	+2	15	2.7
Kyoto Ceramic	2,570	−30	35	0.7
Matsushita Ind.	595	−7	20	1.7
Mitsubishi Bank	279	......	10	1.8
Mitsubishi Heavy	133	−6	12	4.5
Mitsubishi Corp.	416	−2	13	1.6
Mitsui & Co.	316	−1	14	2.2
Mitsukoshi	522	−7	20	1.9
Nippon Denso	1,160	−30	15	0.6
Nippon Shinpan	617	−2	12	1.0
Nissan Motors	800	−14	16	1.0
Pioneer	1,350	−50	48	1.8
Sanyo Electric	206	−1	12	2.9
Sekisui Prefab	875	+1	30	1.7
Shiseido	990	−9	20	1.0
Sony	1,770	−90	40	1.2
Taisho Marine	247	−5	11	2.3
Takeda Chemical	312	−3	15	2.4
TDK	1,470	−50	30	1.0
Teijin	110	−4	10	4.5
Tokio Marine	495	−3	11	1.1
Tokyo Elect Pow'r	1,090	+10	8	3.7
Tokyo Sanyo	250	−1	12	2.4
Tokyo Shibaura	125	......	10	4.0
Toray	126	+1	10	4.0
Toyota Motor	897	−14	20	1.1

Source Nikko Securities, Tokyo.

SWITZERLAND ●

Feb. 17	Price Frs.	+ or −	Div. %	Yld. %
Aluminium	1,350	−40	6	2.2
BBC 'A'	1,760	−15	10	2.8
Ciba Geigy (Fr.100)	1,365	+5	22	1.6
Do. Pt. Certs.	1,010	−25	22	2.2
Do. Reg.	662	−12	22	3.3
Credit Suisse	2,240	−30	16	3.1
Electrowatt	1,850	−20	10	2.7
Fischer (George)	756	−15	5	3.3
Hoffman Pt. Certs	90,250	−250	550	0.6
Do. (small)	8,975	−75	55	0.6
Interfood B	3,975	−25	20	2.5
Jelmoli (Fr.100)	1,565	−10	20	1.3
Nestle (Fr.100)	3,710	−40	85.4	2.3
Do. Reg.	2,400	−10	85.4	3.6
Oerlikon-B (F.250)	2,475	−15	15	0.8
Pirelli SIP (F.100)	297	−4	15	5.1
Sandoz (Fr.250)	4,075	−15	26	1.6
Do. Part Certs.	540	−15	26	2.4
Schindler Ctsf100	340	−10	9	1.3
Sulzer Ctr (F.100)	394	−4	14	3.5
Swissair (F.350)	679	+4	8.57	3.4
Swiss Bank (F.100)	421	−4	10	2.4
Swiss (Re.F.250)	5,175	+25	40	1.9
Union Bank	3,525	−10	20	2.8
Zurich Ins.	12,000	......	40	1.7

MILAN

Feb. 17	Price Lire	+ or −	Div. Lire	Yld. %
Anic	139.75	+5.75	—	—
Ausonia Assic.	961	+11	120	12.5
Bastogi	568	+44	—	—
Fiat	2,011	+17.5	150	7.4
Do. Priv.	1,628	+17	150	9.3
Finsider	83.75	+3	—	—
Italcement	11,600	+150	200	1.7
Italsider	128.5	−0.5	—	—
Mediobanca	32,590	+490	1,000	5.7
Montedison	144	−42	—	—
Olivetti Priv.	898	+27	—	—
Pirelli & Co.	2,249	+38	110	5.0
Pirelli Spa	1,084	+10	80	7.4
Snia Viscosa	685	−22	—	—

NOTES: Overseas prices exclude $ premium. Belgian dividends are after withholding tax.

◆ DM50 denom. unless otherwise stated. ♥ Ptas.500 denom. unless otherwise stated. ✚ Kr.100 denom. unless otherwise stated. ● Frs.500 denom. unless otherwise stated. ¶ Yen 50 denom. unless otherwise stated. $ Price at time of suspension. a Florins. b Schillings. c Cents. d Dividend after pending rights and/or scrip issue. e Per share. f Francs. g Gross div. %. h Assumed dividend after scrip and/or rights issue. k After local taxes. m % tax free. n Francs including Unilac div. p Nom. q Share split. s Div. and yield exclude special payment. t Indicated div. u Unofficial trading. v Minority holders only. y Merger pending. * Asked. † Bid. § Traded. ‡ Seller. z Assumed. xr Ex rights. xd Ex dividend. xc Ex scrip issue. xa Ex all. △ Interim since increased.

NSURANCE, PROPERTY, BONDS

surance Co. Ltd.
-hyard, EC4. 01-248 9111

	33.4	35.2		—
	28.2	29.7		—
	139.8	147.2		—
	145.6	153.3		—
	82.6	87.0		—
	128.2	135.0		—
	119.1	125.4		—
	163.4	172.1		—
	77.9	82.0		—
	132.2	139.2		—
	166.9	175.7		—
	149.0	156.9		—
	120.3	126.7		—
	126.5	133.2		—
	31.4	33.1		—
	109.5	115.3		—
	107.6	113.3		—

Valuations normally Tues.

ssurance Co. Ltd.
St., W.1. 01-437 5962

	171.6	180.6		—
	136.7	143.9		—
	112.7	118.6		—
	97.7	102.8		—
	106.2	111.7		—
	156.7	164.9		—
	199.9	210.4		—
	171.2	180.2		—
	126.1	132.8		—
	103.2	108.6		—
	119.0	125.2		—
	190.2	200.2		—

surance Ltd.♥
d., Reigate. Reigate 40101.

	125.0	131.7		—
	107.2	112.9		—
	103.5	108.9		—
	100.0	105.4		—
	100.7	106.1		—
	99.7	104.9		—

surance
W12 01-749 9111

	61.5	65.3		—
	97.7	103.3		—

Assur. Co. Ltd.
7. 01-534 5544

	115.9	122.1		—
	105.1	110.7	+0.6	—
	111.7	117.6	-0.3	—
	98.8	103.2		—
	102.2	107.6	-0.2	—
	97.3	102.5		—
	97.1	102.3		—
	95.9	101.0		—
	97.1	102.3		—
	95.8	100.9		—
	97.7	102.9		—
	96.4	101.5		—

unit value Feb. 15.

ssur. Co. Ltd.♥
3. 01-623 1288

	128.53			—

ssurance Co.
rs Bar, Herts. P.Bar 51122

	57.1			—
	110.9			—

ance Ltd.♥
embley HA9 0NB 01-902 8876

	£15.87	—	+0.02	—
	952			—
	£10.69	11.31	+0.02	—
	£12.54	13.27		—
	£12.51	13.27	+0.04	—
	109.5	115.9		—
	161	—		—
	£11.89	—		—
	1.501	—	+1	—
	86.1	91.1	+0.3	—
	98.6	104.3	-0.2	—
	92.7	98.1	+0.1	—
	95.5	101.1		—
	91.1	96.4		—
	87.2	92.2	-0.1	—
	100.3	106.1		—
	94.0	99.5	+0.1	—
	96.0	101.6		—
	91.0	96.3		—
	36.0	38.5		—
	26.0	27.6	27.5	-0.5

t value Feb. 16.

ssurance♥
apel Ash W'ton 0902 28511

	98.74			—
	104.46			—

Magna Gp.♥
xbridge UB8 1NE 52181

	35.0	36.8		—
	29.2	30.8		—
	38.0	40.0		—
	33.8	35.6		—
	124.6			
	153.6			

uster Assur. Soc. Ltd.
8, Whitehorse Road. 01-684 9664.

	116.0	121.8		—
	53.0	55.8		—

nster Ass. Co. Ltd.
8, Whitehorse Road. 01-684 9664.

	57.0	60.0		—
	166.6	175.3		—
	54.9	57.7		—
	68.9	72.5		—
	119.6	125.8		—
	63.7	67.0		—
	172.6	176.0		—

ned to new Investment

	191.8			—

nion Group
rshaft, EC3. 01-283 7500

	49.89		-0.57	—
	17.25			—

Life Insurance Co.
WC2A 1HE. 01-242 0282

	146.3	154.0		—
	177.7	187.0		—
	70.6	74.3		—
	214.3			—
	199.6			—
	176.4			—
	124.0			—
	361.4			—

ance Co. Ltd.
01-626 5410

	118.5	—		—
	49.0			—
	165.8	174.0		—

nerce Insurance
don W1R 5FE. 01-439 7081

	122.8	132.8		—

rance Co. Ltd.
rer Pl., EC3 01-626 8031

	66.5	73.4		—

ur/Midland Ass.
EC2. 01-588 1212

	48.3	50.1	-0.4	6.12

Life Ass. Soc. Ltd.♥
igh Wycombe 0494 33377

	102.7	108.1	-0.5	—
	102.3	107.6		—
	109.4	115.1	-0.2	—
	97.7	102.8		—
	103.9	109.83	-0.2	—

lo Life Ins. C. Ltd.♥
Waltham Cross. WX31971

	129.9			—
	41.5	43.7		—

Ass. Soc. Ltd.
Rd., B'mouth 0202 767655

	95.1	100.1		—
	96.1	101.2		—
	111.1	116.9		—
	96.4	101.5		—
	95.1	100.1		—

Life Ass. Soc. Ltd.♥
-Thames Berks. Tel 34284

	£1.097			—
	56.81			—
	119.0	122.1		—
	£8.166			—

Guardian Royal Exchange
Royal Exchange, E.C.3. 01-283 7107

Property Bonds	165.9	172.8		—

Hambro Life Assurance Limited♥
7 Old Park Lane, London, W1 01-499 0031

Fixed Int. Dep.	123.6	130.2		—
Equity	161.0	169.5		—
Property	155.0	163.2		—
Managed Cap.	129.6	136.5		—
Managed Acc.	159.4	167.8		—
Overseas	110.8	116.7		—
Gilt Edged	121.3	127.7		—
Pen.F.I.Dep.Cap.	126.4	133.1		—
Pen.F.I.Dep.Acc.	145.6	153.3		—
Pen.Prop.Cap.	197.6	208.0		—
Pen.Prop.Acc.	251.3	264.6		—
Pen.Man.Cap.	199.2	209.7		—
Pen.Man.Acc.	253.2	266.6		—
Pen.Gilt Edg.Cap.	124.5	131.1		—
Pen.Gilt Edg.Acc.	129.4	136.2		—
Pen.B.S.Cap.	121.8	128.2		—
Pen.B.S.Acc.	136.9	143.8		—
Pen.D.A.F.Cap.	100	100		—
Pen.D.A.F.Acc.	100	100		—

Hearts of Oak Benefit Society
Euston Road, London, NW1 01-387 5020

Hearts of Oak	35.5	37.5		—

Hill Samuel Life Assur. Ltd.♥
NLA Twr., Addiscombe Rd., Croy. 01-686 4355

♦Property Units	145.0	152.3		—
Property Series A	97.5	102.7		—
Managed Units	152.0	160.0		—
Managed Series A	89.8	94.6		—
Managed Series C	88.7	93.4		—
Money Units	118.6	124.9		—
Money Series A	96.0	101.1		—
Fixed Int. Ser. A	92.8	97.7		—
Pns. Mgd. Cap.	142.6	150.2		—
Pns. Mgd. Acc.	148.5	156.4		—
Pns. Gtd. Cap.	104.5	110.0		—
Pns. Gtd. Acc.	108.8	114.6		—

Imperial Life Ass. Co. of Canada
Imperial House, Guildford. 71255

Growth Fd. Feb. 17	67.9	73.8	-1.3	—
Pens. Fd. Feb. 17	63.7	69.3	-0.5	—
Unit Linked Portfolio				
Managed Fund	94.3	99.3		—
Fixed Int. Fd.	95.1	100.1		—
Secure Cap. Fd.	95.0	100.0	-0.1	—
Equity Fund	95.1	100.1		—

Irish Life Assurance Co. Ltd.
11, Finsbury Square, EC2. 01-628 8253

Blue Chip Feb. 1	66.7	70.2		5.29
Managed Fund	211.6	222.8		—
Prop. Mod. Feb. 1	167.2	176.0		—
Prop. Mod. Gth.	181.1	190.6		—

King & Shaxson Ltd.
52, Cornhill, EC3. 01-623 5433

Bond Fd. Exempt	111.43	113.30	+0.77	—
Next dealing date March 1.				
Govt. Sec. Bd.	123.6	130.10		—

Langham Life Assurance Co. Ltd.
Langham Hs, Holmbrook Dr, NW4. 01-203 5211

Langham 'A' Plan	63.9	67.2		—
♦Prop. Bond	139.4	146.7		—
Wisp (SP) Man. Fd	74.8	78.7		—

Legal & General (Unit Assur.) Ltd.
Kingswood House, Kingswood, Tadworth. Surrey KT20 6EU. Burgh Heath 53456

Cash Initial	95.2	100.3		—
Do. Accum.	95.9	101.0		—
Equity Initial	108.9	114.7	-0.5	—
Do. Accum.	109.6	115.4	-0.6	—
Fixed Initial	114.2	120.3	-0.9	—
Do. Accum.	115.0	121.1	-0.9	—
Managed Initial	111.7	117.6	-0.8	—
Do. Accum.	112.5	118.5	-0.7	—
Property Initial	95.1	100.2		—
Do. Accum.	95.8	100.9		—

Legal & General (Unit Pensions) Ltd.

Exempt Cash Init.	95.4	100.5		—
Do. Accum.	95.7	100.8		—
Exempt Eqty. Init.	99.5	104.8		—
Do. Accum.	99.8	105.1		—
Exempt Fixed Init.	97.3	102.5		—
Do. Accum.	97.6	102.8		—
Exempt Mngd. Init.	99.5	104.8		—
Do. Accum.	99.8	105.1		—
Exempt Prop. Init.	95.4	100.5		—
Do. Accum.	95.7	100.8		—

Legal & General Prop. Fd. Mgrs. Ltd
11, Queen Victoria St. EC4N 4TP 01-248 9678

L&GPrp.Fd. Feb. 6	97.8	101.1		—

Next Sub. Day March 1.

Life Assur. Co. of Pennsylvania
39-42 New Bond St., W1Y 0RQ. 01-493 8395

LACOP Units	1033	1085		—

Lloyds Bk. Unit Tst. Mngrs. Ltd.
71, Lombard St., EC3 01-623 1288

Exempt	97.9	103.0		7.85

Lloyds Life Assurance
12 Leadenhall St., EC3M 7LS 01-623 6621

Mlt. Gth. Feb. 8	1.26487			—
Opt.5 Prop. Feb. 16	122.5	129.0		—
Opt.5 Eqty. Feb. 16	117.0	123.2		—
Opt.5 Hy. Feb. 16	156.6	164.9		—
Opt.5 Man. Feb. 16	139.9	147.3		—
Opt.5 Dept. Feb. 16	119.9	126.3		—

London Indemnity & Gnl. Ins. Co. Ltd.
18-20, The Forbury, Reading 583511.

Money Manager	29.8	32.0		—
M.M. Flexible	26.8	27.5		—
Fixed Interest	34.2	36.1	+0.1	—

The London & Manchester Ass. Gp.♥
The Leas, Folkestone, Kent. 0303 57333

Cap. Growth Fund		208.7	-0.4	—
♦Exempt Flex. Fd.		127.5	-0.1	—
♦Exempt Prop. Fd.		86.5	-0.2	—
♦Expt. Inv. Tst. Fd.		139.1	-1.3	—
Flexible Fund		185.7	+0.1	—
Inv. Trust Fund		129.9	+0.2	—
Property Fund		79.8	+0.1	—

M & G Group♥
Three Quays, Tower Hill EC3R 6BQ 01-626 4588

Pers. Pension***	199.2		-2.4	—
Conv. Deposit*	116.3	122.2		—
Equity Bond**	124.9	131.3		—
Family 79-80**		147.6		—
Family 81-86**	162.3			—
Gilt Bond***	105.2	110.6	-1.2	—
Internatnl. Bond**	84.6	88.9		—
Managed Bd***	121.2	127.4	-0.3	—
Property Bd**	148.1	155.6		—
Ex. Yield Fd. Bd.*	76.5	80.4		—
Recovery Fd. Bd.*	57.8	60.8		—
American Fd. Bd.*	43.0	45.2		—
Japan Fd. Bd.*	44.6	46.9		—

Prices on *Feb. 15 **Feb. 16 ***Feb. 17.

Merchant Investors Assurance♥
125 High Street, Croydon 01-686 9171

Conv. Dep. Fd		127.0		—
Money Mrkt. Fd.		142.9	-2.1	—
Mer. Inv. Man. Fd		101.4	-1.6	—
Mer. Inv. Pty. Fd		145.9		—
Equity Bond		55.0	-1.8	—
Prop. Pens.		150.8		—
Man. Pens.		131.1	-1.9	—
Equity Pens.		156.1	-3.1	—
Conv. Dep. Pens.		136.9	-0.1	—
Mon. Mkt. Pens.		183.5	-0.2	—

NEL Pensions Ltd.
Milton Court, Dorking, Surrey. 5911

Nelex Eq. Cap.	80.0	84.2		—
Nelex Eq. Accum.	104.5	110.0		—
Nelex Money Cap.	62.7	65.9		—
Nelex Mon. Acc.	65.1	68.5		—
Nelex Gth Inc Acc.	47.5	50.0		—
Nelex Gth Inc Cap.	47.5	50.0		—

Next sub. day Feb. 25.

For New Court Property see under Rothschild Asset Management

NPI Pensions Management Ltd.
48 Gracechurch St., EC3P 3HH 01-623 4200

Managed Fund	146.3	152.4		—

Prices Feb. 1. Next dealing March 1.

New Zealand Ins. Co. (U.K.) Ltd.♥
Maitland House Southend SS1 2JS 0702 62955

Kiwi Key Inv. Plan	140.6	144.9		—
Small Co's Fd	95.0	100.0		—
Technology Fd.	95.0	100.0		—
Extra Inc. Fd.	95.0	100.0		—
American Fd	95.0	100.0		—
Far East Fd	95.0	100.0		—
Gilt Edged Fd	95.0	100.0		—
Con. Deposit Fd.	95.0	100.0		—

Norwich Union Insurance Group
PO Box 4, Norwich NR1 3NG. 0603 22200

Managed Fund	202.4	213.0	+0.3	—
Equity Fund	315.2	331.8	-0.4	—
Property Fund	122.3	128.7	+0.1	—
Fixed Int. Fund	154.7	162.8	+0.9	—
Deposit Fund	102.0	107.3		—
Nor. Unit Feb. 15	194.9			

Phoenix Assurance Co. Ltd.
4-5, King William St., EC4P 4HR. 01-626 8676

Wealth Ass.	103.9	109.5		—
Eb'r. Ph. Ass.	78.6			
Eb'r. Ph. Eq. E	78.7	74.2		

Prop. Equity & Life Ass. Co.♥
119, Crawford Street, W1H 2AS. 01-486 0857

R. Silk Prop. Bd.		170.3		—
Do. Equity Bd.		68.1		—
Do. Fx. Mny. Bd. Fd.		152.9		—

Property Growth Assur. Co. Ltd.♥
Leon House, Croydon, CR9 1LU 01-680 0606

Property Fund		171.8		—
Property Fund (A)		170.6		—
Agricultural Fund		692.8		—
Agric. Fund (A)		687.2		—
Abbey Nat. Fund		149.2		—
Abbey Nat. Fd. (A)		149.1		—
Investment Fund		64.9	-0.6	—
Investment Fd (A)		64.7	-0.6	—
Equity Fund		162.0		—
Equity Fund (A)		161.4		—
Money Fund		137.0	+0.1	—
Money Fund (A)		136.4	+0.1	—
Actuarial Fund		109.3		—
Gilt-edged Fund		125.0	+0.5	—
Gilt-Edged Fd. (A)		125.0	+0.5	—
♦Retire Annuity		170.4		—
♦Immed. Ann'ty		138.5		—

Prop. Growth Pensions & Annuities Ltd.

All Wther Ac. Uts.	131.3	138.2		—
♦All Weather Cap.	125.4	132.0		—
♦Inv. Fd. Uts.		138.3		—
Pension Fd. Uts.		136.4		—
Conv. Pens. Fd.		140.9		—
Cn. Pns. Cap. Ut.		129.2		—
Man. Pens. Fd.		145.2		—
Man. Pens. Cap. Ut.		135.9		—
Prop. Pens. Fd.		141.1		—
Prop. Pens. Cap. Uts.		130.3		—
Bdg. Soc. Pen. Ut.		127.2		—
Bdg. Soc. Cap. Ut.		118.1		—

Provincial Life Assurance Co. Ltd.
222, Bishopsgate, E.C.2. 01-247 6533

Prov. Managed Fd.	114.4	120.4		—
Prov. Cash Fd.	103.7	109.3		—
Gilt Fund 20	122.5	128.8		—

Prudential Pensions Limited♦
Holborn Bars, EC1N 2NH 01-405 9222

Equit. Fd. Feb. 15	£23.06	23.77		—
Fxd. Int. Feb. 15	£19.09	19.34		—
Prop. F. Feb. 15	£24.20	24.95		—

Reliance Mutual
Tunbridge Wells, Kent. 0892 22271

Rel. Prop. Bds.		192.2		—

Rothschild Asset Management
St. Swithins Lane, London, EC4. 01-626 4356

N.C. Prop. Dec. 30	114.1	121.4		—

Next sub. day March 31.

Royal Insurance Group
New Hall Place, Liverpool. 051 227 4422

Royal Shield Fd.	130.4	137.9		—

Save & Prosper Group♥
4, Gt. St. Helen's, Lndn., EC3P 3EP 01-554 8899

Bal. Inv. Fd.	117.7	124.6		—
Property Fd.*	146.3	154.9		—
Gilt Fd.	120.2	126.2	-0.2	—
Deposit Fd.†	121.4	127.8		—
Comp. Pens. Fd.†	195.5	205.8		—
Equity Pens. Fd.	163.0	172.1	-0.2	—
Prop. Pens. Fd.*	205.0	216.4		—
Gilt Pens. Fd.	93.1	98.0	-0.5	—
Depos. Pens. Fd.†	96.4	101.5		—

Prices on *February 15 †Weekly dealings.

Schroder Life Group♥
Enterprise House, Portsmouth. 0705 27733

Equity Feb. 14		212.6		
Equity 2 Feb. 14	203.4	214.2		—
Equity 3 Feb. 14	111.1	116.9		—
Fixed Int. Feb. 14	140.3	147.8		—
Fixed Int. 3 Feb. 14	150.7	158.6		—
Int. UT Feb. 14	112.6	118.5		—
K & S Gilt Feb. 14	146.3	149.2		—
K&S Gt. Se. Feb. 14	123.6	130.1		—
Mngd. Flx. Feb. 14	125.4	132.0		—
Mngd. 3 Feb. 14	137.9	145.1		—
Money Feb. 14	105.8	111.5		—
Money 3 Feb. 14	115.7	121.8		—
Deposit Feb. 14	112.1	118.1		—
Property Feb. 14	147.7	155.6		—
Property 3 Feb. 14	145.5	153.1		—
BSPn. Cp. Feb. 14		118.2		
BSPn. Acc. Feb. 14		127.0		
Mn.Pn. Cp. Feb. 14	188.4	198.4		—
Mn.Pn. Acc. Feb. 14	221.0	232.7		—

Scottish Widows' Group
PO Box 902, Edinburgh EH16 5BU. 031-655 6000

Inv. Ply. Series 1	95.2	95.2		—
Inv. Ply. Series 2	90.8	94.8		—
Inv. Cash Feb. 17	96.5	101.6		—
Ex U.L. Tr. Feb. 15	129.5	135.1	-3.2	—
Mgd. Pen. Feb. 15	237.3	243.8	-2.0	—

Solar Life Assurance Limited
107 Cheapside, EC2V 6DU. 01-606 6471

Solar Managed S	123.5	130.1	-0.2	—
Solar Property S	107.0	112.7		—
Solar Equity S	149.2	157.1	-0.3	—
Solar Fxd. Int. S	117.5	123.7	+1.8	—
Solar Cash S	99.8	105.2		—
Solar Intl. S	94.1	100.0		—
Solar Managed P	123.4	129.9	+0.2	—
Solar Property P	106.7	112.4		—
Solar Equity P	149.0	156.9	-0.3	—
Solar Fxd. Int. P	117.3	123.5	+1.7	—
Solar Cash P	99.9	105.1		—
Solar Intl. P	94.1	100.0		—

Sun Alliance Fund Mangmt. Ltd.
Sun Alliance House, Horsham. 0403 64141

Exp. Fd. Int. Feb. 8	£153.90	160.30		—
Int. Bn. Feb. 14		£10.64		

Sun Alliance Linked Life Ins. Ltd.
Sun Alliance House, Horsham 0403 64141

Equity Fund	100.9	106.3	-0.3	
Fixed Interest Fd	101.0	106.5	-1.1	
Property Fund	98.2	103.4		
International Fd.	86.8	91.4		
Deposit Fund	95.4	100.5	-0.1	
Managed Fund	97.8	103.0	-0.2	

Sun Life of Canada (U.K.) Ltd.
2, 3, 4 Cockspur St., SW1Y 5BH 01-930 5400

Maple Lf. Grth.		184.1		—
Maple Lf. Mangd.		132.7		—
Maple Lf. Eqty.		121.5		—
Persnl. Pn. Fd.		196.2		—

Target Life Assurance Co. Ltd.
Target House, Gatehouse Rd., Aylesbury, Bucks. Aylesbury (0296) 5941

Man. Fund Inc.	93.8	99.3		—
Man. Fund Acc.	111.1	117.6		—
Prop. Fd. Inc.	106.8	113.1		—
Prop. Fd. Acc.		131.0		—
Prop. Fd. Inv.		102.0		—
Fixed Int. Fd. Inc.	107.4	113.5		—
Dep. Fd. Acc. Inc.	97.2	102.6		—
Ret. Plan Ac. Pen.	67.3	73.5	-0.4	—
Ret. Plan Cap. Pen.	55.7	60.8	-0.3	—
Ret. Plan Man. Acc.	117.8	124.6		—
Ret. Plan Man. Cap.	109.8	116.3		—
Gilt Pen. Acc.	134.0	141.5		—
Gilt Pen. Cap.	128.3	135.5		—

Transinternational Life Ins. Co. Ltd.
2 Bream Bldgs., EC4 1NV. 01-405 6497

Tulip Invest. Fd.	131.2	138.2		—
Tulip Mangd. Fd.	105.3	110.8		—
Man. Bond Fd.	107.9	113.5		—
Man. Pen. Fd. Cap.	110.4	116.2		—
Man. Pen. Fd. Acc.	116.0	122.1		—

Trident Life Assurance Co. Ltd.♥
Renslade House, Gloucester 0452 36541

Managed	117.7	124.7		—
Gtd. Mgd.	147.4	156.1		—
Property	145.3	153.8		—
Equity/American	77.6	82.2		—
U.K. Equity Fund	100.4	106.3	+2.1	—
High Yield	137.4	145.5		—
Gilt Edged	122.2	129.4		—
Money	120.4	126.9		—
International	92.8	98.3		—
Fiscal	123.6	130.9		—
Growth Cap	126.3	133.8		—
Growth Acc.	129.0	136.6		—
Pens. Mngd. Cap.	112.8	119.4		—
Pens. Mngd. Acc.	115.8	122.6		—
Pens. Gtd. Dep. Cap.	100.7	106.6		—
Pens. Gtd. Dep. Acc.	103.4	109.5		—
Pens. Ppty. Cap.	111.2	117.8		—
Pens. Pty. Acc.	114.2	121.0		—
Trdt. Bond	34.7	36.7		—
*Trdt. G.I. Bond		101.2		—

*Cash value for £100 premium.

Tyndall Assurance/Pensions♥
18, Canynge Road, Bristol. 0272 32241

3-Way Feb. 16		119.4		—
Equity Feb. 16		150.6		—
Bond Feb. 16		166.0		—
Property Feb. 16		100.6		—
Deposit Feb. 16		125.6		—
3-Way Pen. Feb. 16		141.0		—
O'seas Inv. Feb. 16		62.4		—
Mn. Pn. 3-W Feb. 1		164.6		—
Do. Equity Feb. 1		244.2		—
Do. Bond Feb. 1		180.8		—
Do. Prop. Feb. 1		81.8		—

Vanbrugh Life Assurance
41-43 Maddox St., Ldn. W1R 9LA 01-499 4923

Managed Fd.	138.8	146.2	-0.3	
Equity Fd.	212.8	224.1	-0.6	
Intnl. Fund	85.4	89.9		
Fixed Interest Fd.	169.2	178.2	-0.9	
Property Fd.	136.6	143.8		
Cash Fund	116.2	122.4		

Vanbrugh Pensions Limited
41-43 Maddox St., Ldn. W1R 9LA 01-499 4923

Managed	95.0	100.1		
Equity	95.0	100.1		
Fixed Interest	93.4	98.4	-0.7	
Property	95.0	100.0		

† Guaranteed see 'Ins. Base Rates' table.

Welfare Insurance Co. Ltd.♥
The Leas, Folkestone, Kent 0303 57333

Moneymaker Fd.		98.9	-0.1	

For other funds, please refer to The London & Manchester Group.

Windsor Life Assur. Co. Ltd.
1 High Street, Windsor. Windsor 68144

Life Inv. Plans	69.0	72.6		—
FutureAssd. Gth. (a)		20.0		—
FutureAssd. Gth. (b)		47.0		—
Ret. Assd. Pens.		£26.38		—
Flex. Inv. Growth	110.1	115.8		—

NCIAL TIMES STOCK INDICES

	Feb. 17	Feb. 16	Feb. 15	Feb. 14	Feb. 13	Feb. 10	A year ago
a....	74.66	74.71	74.11	74.39	75.16	75.40	65.15
......	77.63	77.56	77.14	77.62	77.89	78.16	64.75
ary....	459.5	455.0	453.2	459.7	469.9	471.0	393.0
	157.1	156.6	157.7	155.2	152.3	146.0	107.8
	5.84	5.89	5.89	5.81	5.71	5.70	5.89
full...	17.79	17.94	17.95	12.71	17.39	17.37	18.81
	7.93	7.87	7.87	7.97	8.12	8.15	7.66
	4.589	5.577	6.197	6.087	5.920	6,143	5,578
r £m.	—	69.53	80.52	62.92	43.35	76.97	50.17
tal...	—	14.321	14,617	14,429	13,481	16,592	13,344

m. 455.8. 11 a.m. 456.1. Noon 456.2. 1 p.m. 457.2.
2 p.m. 457.6. 3 p.m. 458.7.
Latest Index 01-246 8026.

Based on 52 per cent corporation tax. • Nil=7.96. Govt. Secs. 15-10-26. Fixed Int. 1928. Ind. Ord. 1-7-35. Gold SE Activity July-Dec. 1942.

GHS AND LOWS

1977-78 High	1977-78 Low	Since Compilation High	Since Compilation Low
9.85 (30/9)	60.45 (4/1)	127.4 (9/1/35)	49.18 (3/1/75)
11.27 (1/78)	60.49 (4/1)	150.4 (28/11/47)	50.53 (3/1/75)
49.2 (14/9)	357.6 (12/1)	549.2 (14/9/77)	49.4 (26/6/40)
74.5 (14/10)	95.1 (1/2)	442.3 (22/5/75)	43.5 (26/10/71)

S.E. ACTIVITY

	Feb. 17	Feb. 16
—Daily		
Gilt-Edged	186.9	215.5
Industries	149.0	182.3
Speculative	39.2	47.2
Totals	104.5	126.9
5-day Average		
Gilt-Edged	210.2	215.3
Industrials	189.7	202.0
Speculative	40.1	39.0
Totals	129.1	136.2

NCIAL TIMES STOCK INDICES

	Feb. 17	Feb. 16	Feb. 15	Feb. 14	Feb. 13	Feb. 10	A Year ago
ip.....	195.77	194.55	194.03	198.32	200.88	201.40	153.60
	215.86	214.78	214.22	218.66	221.51	221.96	179.40
	5.72	5.75	5.76	5.66	5.60	5.58	5.92
	7.98	7.93	7.92	8.08	8.18	8.20	9.13
	200.15	199.09	198.85	202.43	204.52	204.65	165.11

AUTHORISED UNIT TRUSTS

Abbey Unit Tst. Mgrs. Ltd. (a) (z)
72-80, Gatehouse Rd., Aylesbury. 0296 5941

Abbey Capital	30.4	32.3	-0.1	4.07
Abbey Income	36.1	38.4	-0.1	5.70
Abbey Inv. Tst. Fd.	31.3	33.3	-0.1	4.43
Abbey Gen. Tst.	42.4	45.1	-0.1	4.06

Allied Hambro Group (a) (g)
Hambros Hse., Hutton, Brentwood, Essex. 01-588 2851 or Brentwood (0277) 211459

Balanced Funds				
Allied 1st	60.2	64.3	-1.7	5.90
Brit. Ind. Fund	59.6	63.7	-0.3	5.57
Grth. & Inc.	34.7	37.1	-0.1	5.39
Elect. & Ind. Dev.	30.5	32.6	-0.1	5.21
Allied Capital	66.3	70.8	-0.2	4.43
Hambro Fund	97.0	103.6	-0.3	5.50
Hambro Acc. Fd.	110.3	117.8	-0.3	4.43
Income Funds				
High Yield Fd.	63.7	68.1		8.37
High Income	59.2	63.2	-0.3	7.12
A.H. Eq. Inc.	35.8	38.2	-0.1	7.19
International Funds				
International	22.5	24.0	+0.1	2.39
Secs. of America	43.9	46.9	-0.3	3.19
Pacific Fund	31.3	33.4		2.99
Specialist Funds				
Smaller Co.'s Fd	31.7	33.9		5.16
2nd Smlr. Co.'s Fd.	39.7	42.4	-0.2	5.30
Recovery Sits.	83.1	88.8	-0.4	5.06
Met. Min. & C'dty	36.6	39.1		5.85
Overseas Earnings	49.5	52.9	-0.2	5.29
Expt. Smlr. Co's	199.4	209.9	-0.8	5.71

Anderson Unit Trust Managers Ltd.
158 Fenchurch St. EC3M 6AA 623 9231

Anderson U.T.	45.5	48.5		4.87

Ansbacher Unit Mgmt. Co. Ltd.
1 Noble St., EC2V 7JA 01-623 6376

Inc. Monthly Fund	162.0	172.0		9.0

Arbuthnot Securities Ltd. (a)(c)
37, Queen St., London EC4R 1BY 01-236 5281

Extra Income Fd.	110.3	119.3		10.45
High Inc. Fund	38.4	41.8	-0.1	9.45
♦(Accum. Units)	52.3	56.9	-0.1	9.45
(8½% W'drwl. Uts.)	52.3	56.9	-0.1	9.45
Preference Fund	25.5	27.5		12.08
♦(Accum. Units)	37.9	40.8		12.08
Capital Fund*	16.4	17.8		
Commodity Fund	51.4	55.5		5.07
(Accum. Units)	72.5	78.3		5.07
(10% W'drwl. U.)	46.3	50.0		5.07
Fin. & Prop. Fd.	16.9	18.3		3.17
Giants Fund	35.8	38.6	-0.2	3.67
(Accum. Units)	41.3	44.6	-0.2	3.67
Growth Fund	30.2	32.6	-0.2	3.54
(Accum. Units)	35.6	38.4	-0.2	3.54
Ionian Gth. Fd.**	126.6	136.9		5.91
*Eastern & Intl. Fd.	20.2	21.8		1.86
*(6% W'drwl. Uts.)	16.5	17.8		1.86
Foreign Fd.***	67.5	73.0		2.28
‡N. Amer. & Int. Fd.	23.9	25.9	-0.2	1.00

Deal. ‡Mon. *Tues. ††Wed. ‡Thurs. ‡‡Fri. Next dlg. ***Dec. 22. **Dec. 15. Daily.

Archway Unit Tst. Mgs. Ltd.♥ (a)(c)
317 High Holborn, WC1V 7NL 01-831 6233

Archway Fund	76.5	81.4		6.08

Prices at Feb. 15. Next sub. day Mar. 1.

Barclays Unicorn Ltd. (a)(g)♥(c)
Unicorn Ho., 252 Romford Rd. E7 01-534 5544

Unicorn America	28.4	30.5	-0.1	2.60
Do. Aust. Acc.	55.7	60.5	+0.3	2.44
Do. Aust. Inc.	44.1	47.9	+0.3	2.44
Do. Capital	60.3	64.8	-0.3	4.78
Do. Exempt Tst.	102.9	107.2	-0.5	6.19
Do. Extra Income	27.2	29.3	-0.1	8.19
Do. Financial	55.6	60.1	-0.2	5.39
Do. 500	67.3	72.8	-0.2	6.07
Do. General	28.9	31.1	-0.1	6.39
Do. Growth Acc.	37.4	40.4	-0.2	4.37
Do. Income Tst.	76.8	82.6	-0.2	6.52
*Do. Prf. A'ns. Tst.	135.3	141.7		4.45
Prices at Jan. 31. Next sub. day Feb. 28.				
Do. Recovery	38.4	41.5	-0.1	5.74
Do. Trustee Fund	106.6	113.4	-0.7	5.22
Do. W'dwide Trust	43.5	46.8		2.03
B'tst. In. Fd. Inc.	58.8	60.8	-0.2	4.99
Do. Accum.	65.6	68.3	-0.2	4.99

Baring Brothers & Co. Ltd.♥ (a)(x)
88, Leadenhall St., E.C.3. 01-588 2830

Stratton Tst.	166.2	173.2		4.07
Do. Accum.	203.5	212.0		4.07

Next sub. day Feb. 22.

Bishopsgate Progressive Mgmt. Co.♥
9, Bishopsgate, E.C.2. 01-588 6280

B'gate Pr. **Feb. 7	162.3	172.9		3.87
Acc. Uts. **Feb. 7	191.7	204.2		3.87
B'gate Int. Feb. 14	156.2	166.2		3.21
(Accum.) Feb. 14	172.3	183.3		3.21

Next sub. day Feb. 28 **Feb. 21.

Bridge Fund Managers♥(a)(c)
King William St., EC4R 9AR 01-623 4951

Bridge Inc.*	47.2	51.4		8.99
Bridge Cap. Inc.†	31.5	33.6		3.41
Bridge Cap. Acc.†	34.3	36.6		3.41
Bridge Exempt†	126.8	135.0		5.96
Bridge Intl. Inc.†	13.5	14.4		4.28
Bridge Intl. Acc.†	14.7	15.7		4.28

Prices Feb. 14/15. Dealing *Tues. †Wed.

Britannia Trust Management(a)(g)
3 London Wall Buildings, London Wall, London EC2M 5QL. 01-638 0478/0479

Assets	64.8	69.7		5.29
Capital Acc.	46.8	50.3	-0.2	4.30
Comm & Ind.	50.6	54.4	-0.2	4.39
Commodity	67.9	73.0	-0.1	5.82
Domestic	35.5	38.2	-0.2	4.48
Exempt	94.0	98.7	-0.4	8.58
Extra Income	37.3	40.2		9.77
Far East	16.6	17.8	-0.1	4.95
Financial Secs.	61.4	66.0	-0.3	4.49
Gold & General	96.9	104.3	-0.3	2.71
Growth	73.2	78.7	-0.4	4.38
Inc. & Growth	69.0	74.2	-0.2	7.25
Int'l Growth	50.7	54.5		3.48
Invest. Tst. Shares	39.5	42.5	-0.2	3.98
Minerals	38.2	41.1	-0.1	2.90
Nat. High Inc.	72.6	78.0	-0.3	8.82
New Issue	33.5	36.0	-0.1	4.54
North American	26.2	28.2		2.82
Britannia Trust—Continued				
Professional	463.7	467.7	-2.6	3.79
Property Shares	13.6	14.6	-0.1	2.51
Shield	41.8	44.9	-0.1	4.25
Status Change	27.4	29.5	-0.2	5.10
Univ. Energy	29.5	31.7	-0.1	3.60

The British Life Office Ltd.♥ (a)
Reliance Hse., Tunbridge Wells, Kt. 0892 22271

BL British Life	46.3	49.0	-0.2	5.83
BL Balanced*	43.9	47.0		5.49
BL Dividend*	43.2	46.2		8.61

*Prices Feb. 15. Next dealing day Feb. 22.

Brown Shipley & Co. Ltd.♥
Mngrs. Founders Ct., EC2 01-600 8520

BS Units Feb. 13	209.7	223.1		4.65
Do. (Acc.) Feb. 13	258.4	274.9		4.65
Oceanic Trusts (a) (g)				
Financial	33.1	35.1		4.43
General	17.1	18.2		4.28
Growth Accum.	42.2	44.8	-0.1	5.15
Growth Income	34.0	36.1	-0.1	5.15
High Income	29.6	31.6	-0.1	9.10
I.T.U.	18.1	19.2		3.70
Index	22.7	24.7	-0.1	5.36
Overseas	15.9	17.0	-0.1	3.64
Performance	51.8	56.0	-0.2	5.15
Recovery	20.8	22.1	-0.1	5.75
Exmpt. Feb. 10	57.1	59.5		5.74

Canada Life Unit Tst. Mngrs. Ltd.♥
2-6 High St., Potters Bar, Herts. P. Bar 51122

Can. Gen. Dist.	34.7	36.6	-0.3	4.44
Do. Gen. Accum.	42.1	44.4	-0.4	4.44
Do. Inc. Dist.	33.7	35.5	-0.3	7.75
Do. Inc. Accum.	42.9	45.2	-0.3	7.75

Capel (James) Mngt. Ltd.♥
100 Old Broad St., EC2N 1BQ 01-588 6010

Capital	79.8	84.9		4.01
Income	73.2	77.9		7.43

Prices on Feb. 15. Next dealing March 1.

Carliol Unit Fd. Mgrs. Ltd.♥ (a)(c)
Milburn House, Newcastle-upon-Tyne 21165

Carliol	62.8	65.3		4.72
Do. Accum. Units	74.7	77.2		4.72
Do. High Yield	40.5	43.0		8.19
Do. Accum. Units	49.1	51.6		8.19

Next dealing date March 1.

Charterhouse Japhet♥
1, Paternoster Row, EC4 01-248 3999

C.J. Internat'l	20.2	21.6		3.59
Accum. Units	23.4	25.0		3.59
C.J. Income	33.6	35.8		7.84
C.J. Euro. Fin.	25.0	26.6		3.78
Opt.5 Dept. Feb. 9	28.6	30.6		3.78
C.J. Fd. Inv. Tst.	24.8	26.6		4.02
Accum. Units	28.2	30.2		4.02

Price Feb. 15. Next dealing Feb. 22.

Chieftain Trust Managers Ltd.♥(a)(g)
30/31 Queen St. EC4R 1BR 01-248 2932

American	19.4	20.9	-0.1	2.72
High Income	40.0	43.0	-0.2	4.44
International Tst.	21.8	23.5	-0.1	3.46
Basic Resrce. Tst.	23.9	25.7		4.83

Confederation Funds Mgt. Ltd.♥ (a)
50 Chancery Lane, WC2A 1HE 01-242 0282

Growth Fund	38.3	40.3		4.37

Cosmopolitan Fund Managers.
Copthall Ave., London EC2R 7JN 628 9222

Cosmopoln. Gth. Fd.	17.1	18.5		5.06

Crescent Unit Tst. Mgrs. Ltd. (a)(g)
4 Melville Cres., Edinburgh 3 031-226 4931

Crescent Growth	25.7	27.6	-0.1	4.34
Cres. Internat'l	45.9	49.2	-0.2	0.50
Cres. High Dist.	41.4	44.4	-0.2	8.16
Cres. Reserves	37.6	40.3	-0.1	4.65

Discretionary Unit Fund Managers
22, Blomfield St., EC2M 7AL. 01-638 4485

Disc. Income	154.2	164.5		5.28

E. F. Winchester Fund Mngt. Ltd.
Old Jewry, EC2 01-606 2167

Great Winchester	17.8	19.4		6.29
Gt. Winch'er O'seas	18.7	20.4		4.80

Emson & Dudley Tst. Mngmnt. Ltd.
20, Arlington St., S.W.1. 01-499 7551

Emson Dudley Tst.	67.6	72.7		5.10

Equitas Secs. Ltd.♥(a)(g)
41 Bishopsgate, EC2 01-588 2851

Progressive	60.1	63.4	-0.2	4.49

Equity & Law Un. Tr. M.♥ (a)(b)(c)
Amersham Rd., High Wycombe 0494 33377

Equity & Law	60.3	63.4	-0.3	4.53

Framlington Unit Mgt. Ltd. (a)
5-7 Ireland Yard, EC4B 5DH 01-248 6971

Capital Tst.	105.0	111.6		4.00
Income Tst.	96.4	102.6		6.34
Int. Growth Fd.	91.6	97.4		2.56
Do. Accum.	93.8	99.6		2.63

Friends' Provdt. Unit Tr. Mgrs.♥
Pixham End, Dorking. 0306 5055

Friends Prov. Uts.	39.2	41.9	-0.1	4.60
Do. Accum.	50.0	53.4	-0.1	4.60

G.T. Unit Managers Ltd.♥
16 Finsbury Circus EC2M 7DD 01-628 8131

G.T. Cap. Inc.	78.2	83.1	-1.9	3.80
Do. Acc.	93.9	99.8	-2.3	3.80
G.T. Inc. Fd. Un.	157.7	167.7	-3.4	8.00
G.T. U.S. & Gen.	132.1	140.5	-0.6	2.20
G.T. Japan & Gen.	227.3	239.9	-0.1	1.20
♦Gt. Pens. Ex. Fd.	131.0	137.5		4.10
G.T. Int'l. Fund	106.9	113.7	+1.0	2.30
G.T. Four Yds. Fd.	52.2	55.5		7.40

G. & A. Trust (a) (g)
5, Rayleigh Rd., Brentwood (0277) 227300

G. & A.	29.8	31.8	-0.1	4.37

Gartmore Fund Managers ♥ (a)(g)
2, St. Mary Axe, EC3A 8BP. 01-283 3531

(g)American Tst.	22.5	24.2	-0.1	0.94
British Tst. (Acc.)	48.9	52.6	-0.1	3.43
Commodity Share	129.6	139.3	-0.1	3.72
(g) Far East Trust	24.8	26.7	-0.2	1.08
High Income Tst.	54.6	58.8	-0.1	8.95
Income Fund	65.8	70.8	-0.3	6.97
Ins. Agencies	12.05	12.88	-0.02	3.85
Intl. Exempt Fd.	80.4	87.6	-0.2	5.65
(g)Intl. Tst. (Acc.)	26.0	28.0		1.36

Gibbs (Antony) Unit Tst. Mgs. Ltd.
23 Blomfield St., EC2M 7NL 01-588 4111

(a)A.G. Income*	39.4	42.3		8.40
(a)A.G. Growth††	36.0	38.7		4.70
(a)A.G. Far East*	20.4	22.1		8.30

Dealing *Tues. ††Wed.

Govett (John)♥
77, London Wall, E.C.2. 01-588 5620

S'hldr. Feb. 17	119.6	126.0	-0.1	2.45
Do. Accum. Unit	143.0	150.7	-0.2	2.45

Next dealing day March 3.

Grieveson Management Co. Ltd.
59 Gresham St., EC2P 2DS. 01-606 4433

Bar'gtn. Feb. 15	193.6	202.8		4.38
(Accum. Units)	209.9	219.8		4.38
B'gn. HY Feb. 16	169.1	177.1		7.59
(Accum. Units)	189.8	198.8		7.59
Endeav. Feb. 14	159.0	166.2		1.29
(Accum. Units)	164.2	171.6		1.29
Grnchstr. Feb. 17	76.5	80.1	-1.3	3.20
(Accum. Units)	78.8	82.5	-1.4	3.20
Ln. & Brsls. Feb. 15	68.5	71.4		0.85
(Accum. Units)	71.0	74.0		0.85

Guardian Royal Ex. Unit Mgrs. Ltd.
Royal Exchange, EC3P 3DN 01-628 8011

(ag) Guardhill Tst.	*80.9*	*83.8*	*+0.1*	*4.59*

Henderson Administration(a)(z)
Premier U.T. Admin., Rayleigh Road, Brentwood, Essex 0277 217238

(g)Australian	27.2	29.1	+0.1	1.95
Cap. Growth Inc.	38.1	40.8	-0.7	3.94
Cap. Growth Acc.	38.1	40.8	-0.7	3.94
(g)European	33.1	35.3	+0.4	2.14
(g)Far East	59.1	63.6	-0.5	2.55
(g)Finan. & ITU	23.3	25.1	-0.1	3.65
(g) High Income	55.1	58.9	-0.1	8.21
(g) Inc. & Assets	30.4	32.4	-0.1	6.05
(g)International	25.1	26.7		2.23
(g) Nth. American	31.8	34.0	-0.1	1.26
N.A. Gross Feb. 17	102.0	106.3		2.16
Oil & Nat.	23.7	25.2		2.56
W. Wld. Feb. 17	72.2	77.2	-1.1	4.14
(g) Cabot	68.2	73.7		3.42
Cabot Extra Inc.	52.8	55.6	+0.1	8.99

*For tax exempt funds only.

Hill Samuel Unit Tst. Mgrs.† (a)
45 Beech St., EC2P 2LX 01-628 8011

(b) British Trust	143.7	153.7	-0.1	5.42
(g) Int'l Trust	31.8	34.1	-0.1	3.23
(b) Dollar Trust	64.1	68.6	-0.2	1.87
(b) Capital Trust	27.3	29.3	-0.1	4.71
(b) Financial Trust	86.5	92.6	-0.3	4.69
(b) Income Trust	25.5	27.3		7.91
(b) Security Trust	48.9	52.4	-0.1	5.35
(b) High Yield Tst.	27.7	29.7	-0.1	8.33

Intel.♥ (a)(g)
15 Christopher Street, E.C.2. 01-247 7243

Intel. Inv. Fund	84.4	90.9	+0.4	6.90

Key Fund Managers Ltd. (a)(g)
25, Milk St., EC2V 8JE 01-606 7070

Key Energy In. Fd.	67.8	72.1	-0.1	4.09
Key Equity & Gen.	62.9	66.8		5.14
♦Key Exempt Fd.	137.4	146.1		6.65
Key Income Fund	76.1	80.9	-0.1	8.29
Key Fixed Int. Fd.	61.5	65.4		12.07
Key Small Co's Fd	83.4	88.7		6.79

Kleinwort Benson Unit Managers♥
20, Fenchurch St., E.C.3. 01-623 8000

K.B. Unit Fd. Inc.	80.7	87.0		4.57
♦K.B. Unit Fd. Ac.	100.2	108.5		

L & C Unit Trust Management Ltd.♥
The Stock Exchange, EC2N 1HP 01-588 2800

L&C Inc. Fd.	129.5	133.6		7.58
L&C Intl. & Gen. Fd.	85.8	88.5		3.87

Lawson Secs. Ltd. ♥(a)(c)
63 George St., Edinburgh EH2 2JG 031-226 3911

‡Raw. Materials	36.6	38.7	-0.3	7.26
‡(Accum. Units)	38.5	41.9	-0.5	7.26
*Growth Fund	54.5	59.3		3.11
*(Accum. Units)	59.4	64.6		3.11
††Gilt and Warrant	32.9	36.2		1.98
‡American Fd.	20.3	21.9		0.26
‡(Accum. Units)	21.1	22.8		0.26
**High Yield	48.5	52.7		10.54
**(Accum. Units)	66.8	72.6		10.54

Deal. ‡Mon. *Tues. ††Wed. ‡Thurs. **Fri.

Legal & General Tyndall Fund♥
18, Canynge Road, Bristol. 0272 32241

Dis. Jan. 18	54.0	57.2		5.09
(Accum. Units)	67.2	71.2		5.09

Next sub. day March 15.

Leonine Administration Ltd.
2, Duke St., London W1M 6JP. 01-486 5991

Leo Dist.	69.4	73.0	+0.4	5.42
Leo Accum.	73.8	77.7	+0.6	5.10

Lloyds Bk. Unit Tst. Mngrs. Ltd.♥ (a)
Registrar's Dept., Goring-by-Sea, Worthing, West Sussex. 01-623 1288

First (Balncd.)	46.5	50.0		4.60
Do. (Accum.)	62.9	67.6	-0.1	4.60
Second (Cap.)	45.8	49.2	-0.1	3.67
Do. (Accum.)	56.9	61.1	-0.1	3.67
Third (Income)	76.5	82.2	-0.1	6.31
Do. (Accum.)	102.6	110.2	-0.3	6.31
Fourth (ExInc.)	56.2	60.4	-0.1	7.86
Do. (Accum.)	62.4	67.0	-0.1	7.86

Lloyd's Life Unit Tst. Mngrs. Ltd.
72-80, Gatehouse Rd., Aylesbury 0296 5941

Equity Accum.	138.6	145.9		4.33

M & G Group♥ (y)(c)(z)
Three Quays, Tower Hill, EC3R 6BQ 01-626 4588
See also Stock Exchange Dealings

American	38.7	41.2	-0.3	0.97
(Accum. Units)	39.4	42.0	-0.3	0.97
Australasian	40.0	43.0		2.52
(Accum. Units)	40.7	43.7		2.52
Commodity	61.0	65.6	-0.4	4.99
(Accum. Units)	65.8	70.7	-0.4	4.99
Compound Growth	93.9	100.9	-0.1	4.13
Conversion Growth	47.8	51.4	-0.1	4.03
Conversion Inc.	53.5	57.0	+0.1	8.90
Dividend	108.6	115.7	+0.4	8.30
(Accum. Units)	201.3	214.4	+0.7	8.30
European	45.7	48.9	-0.2	2.63
(Accum. Units)	46.3	49.5	-0.3	2.63
Extra Yield	79.7	84.9	-0.2	8.61
(Accum. Units)	103.8	110.5	-0.2	8.61
Far Eastern	38.6	41.2	+0.1	3.18
(Accum. Units)	41.7	45.2	-0.2	3.18
Fund of Inv. Tsts.	54.8	58.9	-0.1	4.73
(Accum. Units)	65.8	70.7	-0.1	4.73
General	149.6	162.3	-0.1	6.14
(Accum. Units)	228.3	247.7	-0.1	6.14
High Income	100.7	100.7	-0.1	8.91
(Accum. Units)	154.0	164.0		8.91
Japan Income	124.5	133.2	-0.4	1.39
(Accum. Units)	124.7	133.4	-0.4	1.39
Magnum	175.1	186.5	+0.1	4.53
(Accum. Units)	218.3	232.5	+0.1	4.53
Midland	153.3	163.3		7.09
(Accum. Units)	248.5	264.6	-0.1	7.09
Recovery	73.3	78.0	-0.2	4.78
(Accum. Units)	74.0	79.6	-0.2	4.78
Second Gen	152.0	163.4	-0.1	5.37
(Accum. Units)	227.2	244.2	-0.1	5.37
Special	142.2	151.4	-0.1	4.33
(Accum. Units)	178.9	190.5	-0.2	4.33
Specialised Funds				
Trustee	134.6	142.0	-0.4	6.74
(Accum. Units)	255.5	269.6	-0.8	6.74
Charibond Feb. 14		114.0		10.51
Charifd. Feb. 14	140.1	142.2		7.71
(Accum. Units)	170.3	172.9		7.71
Pens. Ex. Feb. 13	122.2	128.9		5.97

ManuLife Management Ltd.
St. George's Way, Stevenage. 0438 56101

Growth Units	46.9	49.4	-2.2	4.21

Mayflower Management Co. Ltd.
14/18 Gresham St., EC2V 7AU 01-606 8099

Income Feb. 7	107.7	113.4		7.79
General Feb. 7	67.7	71.3		6.03

Mercury Fund Managers Ltd.
30, Gresham St., EC2P 2EB. 01-600 4555

Merc. Gen. Feb. 15	165.2	175.7		4.75
Acc. Uts. Feb. 8	212.2	225.7		4.75
Merc. Int. Feb. 15	56.9	60.5		1.89
Accm. Uts. Feb. 15	61.1	65.0		1.89
Merc. Ext. Jan. 26	211.9	220.7		4.15
Accum. Uts. Jan. 26	252.9	263.4		4.15

Midland Bank Group Unit Trust Managers Ltd.♥ (a)
Courtwood House, Silver Street, Head, Sheffield, S1 3RD Tel. 0742 79842

Commodity & Gen.	56.2	60.4	+0.1	6.04
Do. Accum.	63.8	68.6	+0.2	6.04
Growth	32.5	34.8		3.56
Do. Accum.	34.4	36.8	-0.1	3.56
Capital	23.7	25.4	-0.1	3.96
Do. Accum.	25.6	27.4	-0.1	3.96
Income	46.6	49.9	-0.1	6.54
Do. Accum.	53.1	56.9	-0.1	6.54
International	39.3	42.5		3.02
Do. Accum.	41.5	44.9		3.02
High Yield	57.7	61.5		8.60
Do. Accum.	59.6	63.5		8.60
Equity Exempt*	103.4	109.1		5.26
Do. Accum.*	103.4	109.1		5.26

*Prices at Jan. 31. Next dealing Feb. 28.

Minster Fund Managers Ltd.
Minster Hse., Arthur St., E.C.4 01-623 1050

Minster Feb. 13	33.5	35.5		5.62
Exempt Dec. 31	85.4	89.4		5.92

MLA Unit Trust Mgemnt. Ltd.
Old Queen Street, SW1H 9JG 01-930 7333

MLA Units	35.2	37.0		4.59

Mutual Unit Trust Managers♥ (a)(g)
15 Copthall Ave. EC2R 7BU. 01-606 4803

Mutual Sec. Plus	47.6	51.4	-0.1	6.94
Mutual Inc. Tst.	63.4	68.1	-0.3	7.84
Mutual Blue Chip	41.0	44.3	-0.3	6.86
Mutual High Yld.	57.7	62.0	-0.3	8.53

National and Commercial
31, St. Andrew Square, Edinburgh 031-556 9151

Income Feb. 15	144.0	149.4		5.96
(Accum. Units)	194.8	202.0		5.96
Capt. Feb. 15	117.6	122.0		3.44
(Accum. Units)	142.4	147.6		3.44

National Provident Inv. Mngrs. Ltd.♥
48, Gracechurch St., EC3P 3HH 01-623 4200

N.P.I. Gth. Un. Tst.	44.4	47.3		3.75
(Accum. Units)*	53.3	56.8		3.75
NPI O'seas Trust	111.4	117.9		3.20
(Accum. Units)**	117.8	124.7		3.20

**Prices on Jan. 26. Next dealing Feb. 28. *Prices Feb. 15. Next dealing March 1.

National Westminster♥(a)
161, Cheapside, EC2V 6EU 01-606 6060

Capital (Accum.)	57.0	61.3	-0.2	4.80
Extra Inc.	63.7	68.5	-0.1	7.43
Financial	32.0	34.4		5.31
Growth Inv.	79.8	85.8	-0.2	5.05
Income	34.0	36.6	-0.1	6.64
Portfolio Inv. Fd.	65.1	69.6	-0.2	5.77
Universal Fd. (d)	47.3	50.9	-0.1	3.00

NEL Trust Managers Ltd.♥ (a)(g)
Milton Court, Dorking, Surrey. 5911

Nelstar	57.9	60.9	-0.4	5.08
Nelstar High Inc.	48.0	50.5		9.42

For New Court Fund Managers Ltd. see Rothschild Asset Management

Norwich Union Insurance Group (b)
P.O. Box 4, Norwich, NR1 3NG. 0603 22200

Group Tst. Fd.	329.0	346.3	-3.5	5.07

Pearl Trust Managers Ltd. (a)(g)(z)
252 High Holborn, WC1V 7EB 01-405 8441

Pearl Growth Fd.	21.6	23.3	-0.1	6.21
Accum Units	25.0	26.9	-0.1	6.21
Pearl Inc.	30.1	32.4	-0.1	7.05
Pearl Unit Tst.	32.6	35.1	-0.1	5.23
(Accum. Units)	41.4	44.6	-0.2	5.23

Pelican Units Admin. Ltd. (g)(x)
81 Fountain St., Manchester 061-236 5685

Pelican Units	77.2	82.9	-0.5	5.22

Perpetual Unit Trust Mngmt.♥ (a)
48 Hart St., Henley on Thames 04912 6868

Pp'tual Gp. Gth.	36.9	39.4		4.09

Piccadilly Unit T. Mgrs. Ltd.♥ (a)(b)
Wardgate Hse., 59a London Wall EC2 01-638 0801

Extra Income	30.3	32.6	+0.4	9.50
Small Co's Fd	38.0	40.9	+0.3	3.53
Capital Fund	47.3	50.8	-0.4	3.79
Int. Ern. & Assets	45.6	49.0	-0.2	3.40
Private Fund	35.3	37.9	-0.3	4.36
Accumltr. Fund	60.0	64.5	-0.5	5.26
Technology Fund	55.9	60.0	+0.2	5.56
Far East Fd	23.1	24.4	-0.1	3.00
American Fund	22.3	23.3	-0.1	3.10

Practical Invest. Co. Ltd.♥ (y)(c)
44, Bloomsbury Sq. WC1A 2RA 01-623 8893

Practical Feb. 15	135.3	143.6		4.32
Accum. Units	189.0	200.6		4.32

Provincial Life Inv. Co. Ltd.♥
222, Bishopsgate, E.C.2. 01-247 6533

Prolific Units	70.3	75.3		3.69
High Income	102.4	109.7		7.90

Prudl. Portfolio Mngrs. Ltd.♥ (a)(b)(c)
Holborn Bars, EC1N 2NH 01-405 9222

Prudential	116.0	123.0	-0.5	4.57

Quilter Management Co. Ltd.♥
The Stk. Exchange, EC2N 1HP 01-600 4177

Quadrant Gen. Fd.	101.0	104.2		4.17
Quadrant Income	115.7	119.3		7.88

Reliance Unit Mgrs. Ltd.♥
Reliance Hse., Tunbridge Wells, Kt. 0892 22271

Opportunity Fd.	59.1	63.2		5.97
Sekforde T. (Acc.)	39.5	42.2	-0.2	5.70
Sekforde T. Inc.	39.1	41.8	-0.2	5.70

Ridgefield Management Ltd.
PO Box 419, Bank Hse., Manchester 061-236 8521

Ridgefield Int. UT	82.0	88.0		2.85
Ridgefield Income	93.0	99.0		9.25

Rothschild Asset Management (g)
72-80, Gatehouse Rd., Aylesbury. 0296 5941

N.C. Equity Fund	151.0	160.0	-0.2	3.31
N.C. Engy. Res. Tst.	92.0	97.8	-0.3	2.94
N.C. Income Fund	136.7	145.4	-0.2	7.44
N.C. Intl. Fd. (Inc.)	73.0	77.6	-0.3	1.94
N.C. Intl. Fd. (Acc.)	73.0	77.6	-0.3	1.94
N.C. Smllr. Coys Fd.	141.7	150.8	-0.9	4.41

Rothschild & Lowndes Mgmt. (a)
St. Swithins Lane, Ldn., EC4. 01-626 4356

New Ct. Exempt.	£113.0	120.0	-4.0	3.73

Prices on Feb. 15. Next dealing Mar. 15.

Rowan Unit Trust Mngt. Ltd.
City-Gate Hse., Finsbury Sq., EC2. 01-606 1066

Rowan Am. Feb. 16	60.0	62.0		1.22
Rowan Sec. Feb. 14	151.0	159.0		4.10
Rowan Hy. Feb. 16	50.9	53.5		7.73
(Accum. Units)	69.9	73.4		7.73
Rwn. Mrln. Feb. 16	68.8	72.3		4.42
(Accum. Units)	84.0	88.2		4.42

Royal Tst. Can. Fd. Mgrs. Ltd.
54, Jermyn Street, S.W.1. 01-629 8252

Capital Fd.	61.7	65.1		4.01
Income Fd.	66.4	70.1		8.03

Save & Prosper Group
4, Great St. Helens, London EC3P 3EP
68-73 Queen St., Edinburgh EH2 4NX
Dealing to: 01-554 8899 or 031-226 7351

Save & Prosper Securities Ltd.♥

International Funds				
Capital	32.0	34.4	-0.1	3.79
I.T.U.	22.0	23.6		4.04
Univ. Growth	57.0	61.2	+0.1	2.24
Increasing Income Fund				
High-Yield	52.6	56.5	-0.1	6.86
High Income Funds				
High Return	60.6	65.1	-0.2	8.62
Income	41.2	44.2	-0.1	8.65
U.K. Funds				
UK Equity	41.0	44.0	-0.2	4.90
Overseas Funds(z)				
Europe	77.1	82.9	-1.0	2.85
Japan	77.4	83.2	-0.3	1.54
U.S.	63.4	68.3	-0.3	3.14
Sector Funds				
Commodity	65.2	70.1	-0.1	4.56
Energy	59.5	64.0	-0.2	3.00
Financial Secs.	63.4	68.1	-0.2	2.96
High-Minimum Funds				
Select Internat.	215.9	227.8	-0.2	2.91
Select Income	50.7	53.5	-0.1	7.83

Scotbits Securities Ltd.♥

Scotbits	35.4	38.0	-0.1	4.06
Scotyield	47.9	51.5	-0.1	7.13
Scotshares	52.0	55.9	-0.2	4.74
Scot. Ex. Gth.*‡	195.2	207.6		2.08
Scot. Ex. Yld.*‡	162.5	170.2		7.39

*Prices at Feb. 8. Next sub. day Feb. 22.

Schlesinger Trust Mngrs. Ltd. (a)(z)
(Incorporating Trident Trusts)
140, South Street, Dorking. (0306) 86441

Am. Exempt*	18.9	19.9		2.06
Am. Growth	24.4	26.2	-0.2	2.64
Exempt High Yld.*	25.1	26.4		8.67
Exempt Mkt. Ldrs.*	23.6	24.9		4.50
Extra Inc. Tst.	28.5	30.6		9.60
Income Dist.	39.9	43.4	-0.1	9.29
Inc. 10% Wdrwl.	30.7	33.4	-0.1	—
Intnl. Growth	40.3	43.3	-0.3	3.34
Inv. Tst. Units	22.7	24.4		4.99
Market Leaders	26.8	28.8	-0.1	4.71
*Nil Yield	26.6	28.7		0.01
Pref. & Gilt Trust	23.7	24.9		11.64
Property Shares	25.6	27.5		2.26
Special Sit. Tst.	25.1	27.0		2.79
U.K. Grth. Accum.	20.0	21.5		5.94
U.K. Grth. Dist.	18.1	19.5	-0.1	5.94

*Next sub. Feb. 22.

J. Henry Schroder Wagg & Co. Ltd.♥
120, Cheapside, E.C.2. 01-248 3434

Capital Feb. 14	93.3	96.6		2.49
(Accum.)	112.1	116.1		2.49
Income Feb. 14	171.6	177.6		7.08
(Accum. Units)	249.8	258.8		7.08
General Feb. 15	74.5	77.6		3.45
(Accum. Units)	91.7	95.5		3.45
Europe Feb. 9	26.9	28.6		1.40
(Accum. Units)	29.4	31.2		1.40
*Pn/Chy. Jan. 24	166.2	171.3		4.00
*Spec. Ex. Feb. 7	211.8	218.3		4.03
*Recovery Feb. 7	177.2	182.6		5.16

*For tax exempt funds only.

Scottish Equitable Fnd. Mgrs. Ltd.♥
28 St. Andrews Sq., Edinburgh 031-556 9101

Income Units	48.1	51.2		5.40
Accum. Units	54.2	57.7		5.40

Dealing day Wednesday.

Sebag Unit Tst. Managers Ltd.♥ (a)
PO Box 511, Bcklbry. Hse., E.C.4. 01-236 5000

Sebag Capital Fd.	31.6	33.1	-0.2	3.76
Sebag Income Fd.	28.9	30.3		8.15

Security Selection Ltd.
15-19, Lincoln's Inn Fields, WC2 01-831 6936-9

Unvl. Gth. Tst. Acc.	22.2	23.7		3.96
Unvl. Gth. Tst. Inc.	19.6	20.9		3.96

Stewart Unit Tst. Managers Ltd. (a)
45, Charlotte Sq., Edinburgh. 031-226 3271

Stewart American Fund				
Standard Units	54.4	57.9		1.70
Accum. Units	58.6	62.5		—
Withdrawal Units	44.6	47.7		—
Stewart British Capital Fund				
*Standard	127.7	138.2		3.55
Accum. Units	144.6	156.6		—

Sun Alliance Fund Mngt. Ltd.
Sun Alliance Hse., Horsham 0403 64141

Exp. Eq. Tst. Feb. 8	£191.80	200.90		4.57
♦The Family Fd.	84.4	89.7	-0.1	3.94

Target Tst. Mngrs. Ltd.♥ (a)(g)
31, Gresham St., EC2. Dealings: 0296 5941

Target Commodity	31.6	34.0		4.59
Target Financial	55.4	60.5	-0.3	4.56
Target Equity	34.7	37.3		6.34
Target Ex. Feb. 15	204.3	211.7		6.19
♦Do. Acc. Units	270.9	280.7		6.19
Target Gilt Fund	118.4	124.4	+0.4	3.00
Target Growth	27.9	30.0	-0.1	4.93
Target Intl.	22.7	24.4		2.07
Do. Reinv. Units	26.7	28.6	-0.1	2.07
Target Inv.	27.1	29.1	-0.1	3.83
Target Pr. Feb. 15	150.8	158.7		4.39
Tgt. Inc.	27.9	30.0	-0.1	9.18
Tgt. Pref.	14.7	16.2	-0.1	10.85
Coyne Growth Fd.	17.5	18.8	-0.1	4.40

Target Tst. Mgrs. (Scotland) (a)(b)
19, Athol Crescent, Edin. 3. 031-229 8621-2

Target Eagle	22.8	24.6		1.59
Target Thistle	37.7	40.5		5.92
Extra Income Fd.	58.0	62.4	-0.1	10.50

Trades Union Unit Tst. Managers♥
100, Wood Street, E.C.2. 01-628 8011

TUUT Feb. 1	48.9	52.1		5.22

Transatlantic and Gen. Secs. Co.♥
91-99 New London Rd. Chelmsford 0245 51651

Barbican Feb. 16	71.6	76.2		5.79
(Accum. Units)	108.0	114.8		5.79
Barb. Euro. Jan. 25	80.1	82.5		3.82
Buckm. Feb. 16	72.6	76.3		4.30
(Accum. Units)	88.4	92.8		4.30
Colemco Feb. 17	114.0	121.1	-3.5	5.79
(Accum. Units)	135.4	143.9	-4.0	5.79
Cumrld. Feb. 15	51.5	54.6		6.57
(Accum. Units)	55.0	58.4		6.57
Glen. Feb. 14	50.9	54.2		5.54
(Accum. Units)	64.1	68.3		5.54
Marlboro Feb. 14	46.4	48.6		2.72
(Accum. Units)	52.3	54.9		2.72
Van. Gwth. Feb. 14	46.6	49.1		3.32
(Accum. Units)	56.7	59.7		3.32
Van. Hy. Feb. 14	67.9	71.5		7.76
Vang. Tec. Feb. 15	42.9	44.8		6.07
(Accum. Units)	43.3	45.3		6.07
Wick'r Feb. 16	55.6	58.9		5.32
(Accum. Units)	66.0	69.9		5.32
Wick Dv. Feb. 17	62.8	66.9	-1.3	8.86
Do. Accum.	69.3	73.8	-1.5	8.86

Tyndall Managers Ltd.♥
18 Canynge Road, Bristol. 0272 32241

Income Feb. 15	95.4	100.2		7.63
(Accum. Units)	169.0	177.6		7.63
Cap. Feb. 15	116.2	122.2		4.30
(Accum. Units)	161.2	169.4		4.30
Exempt Jan. 25	110.2	115.8		7.43
(Accum. Units)	152.0	159.6		7.43
Canynge Feb. 15	92.8	97.6		5.60
(Accum. Units)	114.4	120.2		5.60
Int. Earn. Feb. 15	226.8	238.2		5.25
(Accum. Units)	251.4	264.0		5.25
Scot. Cap. Feb. 15	131.0	137.6		5.04
(Accum. Units)	153.2	161.0		5.04
Scot. Inc. Feb. 15	153.0	160.8		9.00
London Wall Group				
Capital Growth	74.9	80.1	-0.1	6.29
Do. Accum.	76.5	81.8		6.29
Extra Inc. Growth	35.3	37.9	-0.1	10.09
Do. Accum.	39.3	42.2	-0.1	10.09
Financial Pr'rty	16.0	17.1	-0.1	4.56
Do. Accum.	19.4	20.8	-0.1	4.56
High Inc. Priority	57.7	62.0	-0.3	8.49
International	25.7	27.4		4.85
Special Sits.	28.2	30.1	-0.1	5.14

TSB Unit Trusts (y)
21, Chantry Way, Andover, Hants. 0264 62188
Dealings to 0264 63432-3

(b)TSB General	40.9	43.8	-0.1	3.99
(b) Do. Accum.	51.8	55.5	-0.1	3.99
(b) TSB Income	56.4	60.1	-0.3	7.41
(b) Do. Accum.	57.5	61.2	-0.3	7.41
TSB Scottish	71.2	75.8	-0.3	2.85
(b) Do. Accum.	75.6	80.5	-0.4	2.85

Ulster Bank♥ (a)
Waring Street, Belfast 0232 35231

(b)Ulster Growth	34.9	37.5	-0.2	4.90

Unit Trust Account & Mgmt. Ltd.
King William St. EC4R 9AR 01-623 4951

Friars Hse. Fund	136.0	144.0		4.72
Wieler Grth. Fnd	28.6	30.2		3.42
Do. Accum.	32.4	34.2		3.42

Wieler Growth Fund
King William St. EC4R 9AR 01-623 4951

Income Units	28.6	30.2		3.42
Accum. Units	32.4	34.2		3.42

OFFSHORE AND OVERSEAS FUNDS

Arbuthnot Securities (C.I.) Limited
P.O. Box 284, St. Helier, Jersey. 0534 72177

Cap. Tst. (Jersey)	116.0	120.0		3.65
Next dealing date Feb. 27.				
East & Intl. Tst. (C.I.)	101.0	111.0		3.38

Next sub. Feb. 23.

Australian Selection Fund NV
Market Opportunities, c/o Irish Young & Outhwaite, 127, Kent St., Sydney.

US$1 Shares	$US1.42			—

Net asset value February 16.

Bank of America International S.A.
35 Boulevard Royal, Luxembourg G.D.

Wldinvest Income	$US106.96	107.53		6.74

Prices at Feb. 9. Next sub. day Feb. 15.

Bnk. of Lndn. & S. America Ltd.
40-66, Queen Victoria St., EC4. 01-600 2313

Alexander Fund	$US5.96	—		—

Net asset value Feb. 15.

Banque Bruxelles Lambert
2, Rue De la Regence B 1000 Brussels

Renta Fund LF	1,946	2,006	-1	8.36

Barclays Unicorn Int. (Ch. Is.) Ltd.
1, Charing Cross, St. Helier, Jrsy. 0534 73741

Overseas Income	49.7	52.3	-0.5	10.17
Unidollar Trust	$US1.14	[illegible]		4.60*

*Subject to fee and withholding taxes

Barclays Unicorn Int. (I. O. Man) Ltd.
1 Thomas St., Douglas, I.o.M. 0624 4856

Unicorn Aust. Ext.	40.3	43.4	+0.8	2.10
Do. Aust. Min.	23.9	25.7	-0.3	2.30
Do. Grtr. Pacific	56.8	61.1		—
Do. Intl. Income	40.1	43.2		8.10
Do. I. of Man Tst.	46.4	49.9	-0.3	8.80
Do. Manx Mutual	22.1	23.8		2.10

Bishopsgate Commodity Ser. Ltd.
P.O. Box 42, Douglas, I.o.M. 0624-23911

ARMAC* Feb. 6	$US26.69		+0.50	—
CANRHO** Feb. 6	£1.010			—
COUNT** Feb. 6	£2.336			—

Originally issued at *$10 and **£1.00.

Bridge Management Ltd.
P.O. Box 508, Grand Cayman, Cayman Is.

N'bashi Feb.	¥13,857			—
G.P.O. Box 590 Hong Kong				
Nippon Fd. Feb. 15	$US13.65	14.27		0.87

Ex-Stock Split.

Britannia Tst. Mngmt. (CI) Ltd.
30 Bath St., St. Helier, Jersey. 0534 73114

Growth Invest.	30.3	32.8	-1.2	4.40
Intnl. Fd.	62.2	67.2	-2.6	1.00
Jersey Energy Tst.	137.3	148.4	+2.1	1.50
Univsl. Dlr. Tst.	$4.93	5.19	-0.15	—
Univsl. $ Tst. Stg.	£2.11	2.22	-0.09	1.00

Value Feb. 17. Next dealing Feb. 20.

Butterfield Management Co. Ltd.
P.O. Box 195, Hamilton, Bermuda.

Buttress Equity	2.03	1.97		2.09
Buttress Income	1.99	1.92		7.49

Prices at Feb. 6. Next sub. day March 13.

Capital International S.A.
37 rue Notre-Dame, Luxembourg.

Capital Int. Fund	$US15.41			—

Charterhouse Japhet
1, Paternoster Row, EC4 01-248 3999

Adiropa	DM30.50	32.10		5.61
Adiverba	DM48.70	50.60		5.34
Fondak	*DM31.70*	*33.40*	*-0.10*	*5.99*
Fondis	DM20.00	21.10	-0.10	6.16
Emperor Fund	$US2.63	2.73		—
Hispano	$US41.52	46.70		1.93

Cornhill Ins. (Guernsey) Ltd.
P.O. Box 157, St. Peter Port, Guernsey

Intnl. Man. Fd.	163.0	177.5		—

Delta Group
P.O. Box 3012, Nassau, Bahamas

Delta Inv. Feb. 14	$1.27	1.33		—

Deutscher Investment-Trust
Postfach 2685 Biebergasse 6-10 6000 Frankfurt.

Concentra	DM19.40	20.70		—
Int. Rentenfonds	DM68.40	[illegible]		—

Dreyfus Intercontinental Inv. Fd.
P.O. Box N3712, Nassau, Bahamas.

NAV Feb. 14	$US12.27	13.35		—

Emson & Dudley Tst. Mgt. Jrsy. Ltd.
P.O. Box 73, St. Helier, Jersey. 0534 20591

E.D.I.C.T.	117.1	124.7		—

F. & C. Mgmt. Ltd. Inv. Advisers
1-2 Laurence Pountney Hill, EC4R 0BA. 01-623 4680

Cent. Fd. Feb. 8	$US4.38			—

Fidelity Mgmt. & Res. (Bda.) Ltd.
P.O. Box 670, Hamilton, Bermuda.

Fidelity Am. Ass.	$US20.21			—
Fidelity Int. Fund	$US18.25		-0.20	—
Fidelity Pac. Fd.	$US39.70			—
Fidelity Wrld. Fd.	$US12.13		-0.03	—
Fidelity Ster. Fds.				
Series A (Intnl.)	£3.87		-0.01	—
Series B (Pacific)	£6.29			—
Series D (Am. Ass.)	£13.21			—

First Viking Commodity Trusts
8, St. George's St., Douglas, I.o.M. 0624 4682 Ldn. Agts. Dunbar & Co. Ltd., 53, Pall Mall, London SW1Y 5JH 01-930 7857

Fst. Vik. Cm. Tst.	41.1	43.3		2.00
Fst. Vk. Dbl. Op. Tst.	67.0	72.0		0.70

Fleming Japan Fund S.A.
37, rue Notre-Dame, Luxembourg

Flmg. Feb. 14	$US40.81			—

Free World Fund Ltd.
Butterfield Bldg., Hamilton, Bermuda.

NAV Jan. 31	$US164.19			—

G.T. Management Ltd. Ldn. Agts.
Park Hse., 16 Finsbury Circus, London EC2. Tel: 01-628 8131 TLX: 886100

Management International Ltd.
c/o Bk. of Bermuda Front St., Hamltn., Bmda.

Anchor 'B' Units	$US0.78	0.84		1.95
Anchor Int. Fd.	$US3.82	4.05		1.99

G.T. Bermuda Ltd.
Bk. of Bermuda Front St., Hamltn., Bmda.

Berry Pac. F.	$38.36			1.05
G.T. $Fd.	$US6.34			0.80

G.T. Mgt. (Asia) Ltd.
Hutchison Hse., Harcourt Rd., Hong Kong

G.T. Asia F.	$HK7.29	7.60		1.97
G.T. Bond Fund	$US12.02		-0.05	5.30

G.T. Management (Jersey) Ltd.
Royal Tst. Hse., Colomberie, St. Helier, Jersey

G.T. Asia Sterling	£10.60	11.18		1.79

Bank of Bermuda (Guernsey) Ltd.
31-35, Le Pollet, Guernsey, 0481-26268

Berry Pac. Strlg.	265.0	215.28		1.40
Anchor Gilt Edge	£10.54	10.53	-0.02	12.00
Anchor In. Jsy. Tst.	22.4	24.0	-0.3	3.26

Gartmore Invest. Ltd. Ldn. Agts.
2, St. Mary Axe, London, EC3 01-283 3531

Gartmore Fund Mngt. (Far East) Ltd.
1503 Hutchison Hse. 10 Harcourt Rd. H.Kong

HK & Pac. U. Tst.	$HK2.39	2.62	-0.3	3.00
Japan Fd.	$US12.18	11.99		—
N. American Tst.	$US9.95	10.13	+0.59	—
Intl. Bond Fund	$US10.02	10.45		—

Gartmore Investment Mngt. Ltd.
P.O. Box 32, Douglas, IoM. 0624 23911

International Inc.	21.0	22.4		11.50
Do. Growth	54.6	58.1		5.32

Hambro Pacific Fund Mgmt. Ltd.
2110, Connaught Centre, Hong Kong

Far East Feb. 11	9.69	10.20		—
Japan Fund	$US6.06	6.37	+0.16	—

Hambros (Guernsey) Ltd./
Hambro Fund Mgrs. (C.I.) Ltd.
P.O. Box 86, Guernsey 0481-26521

C.I. Fund	137.3	146.2		3.90
Intnl. Bond	$US92.0	96.61		8.50
Int. Equity	$US9.99	10.20		2.50
Int. Savings 'A'	$US1.00	1.03		8.50
Int. Savings 'B'	$US1.05	1.03		2.50

Prices on Feb. 15. Next dealing Feb. 22.

Henderson Baring Fund Mgrs. Ltd.
P.O. Box N4723, Nassau, Bahamas

Japan Fd.	14.87	15.52		—

Prices on Feb. 8. Next dealing date Feb. 22.

Hill-Samuel & Co. (Guernsey) Ltd.
8 LeFebvre St., Peter Port, Guernsey, C.I.

Guernsey Tst.	143.7	153.7	-1.1	3.58

Hill Samuel Overseas Fund S.A.
37, Rue Notre-Dame, Luxembourg

	$US15.22	[illegible]	-0.17	—

International Pacific Inv. Mngt. Ltd.
PO Box R237, 56, Pitt St., Sydney, Aust.

Javelin Equity Tst.	$1.91	2.01	-0.01	—

J.E.T. Managers (Jersey) Ltd.
PO Box 194, Royal Tst. Hse., Jersey 0534 27441

Jersey Extrnl. Tst.	108.0	116.0		—

As at Jan. 31. Next sub. day Feb. 28.

Jardine Fleming & Co. Ltd.
46th Floor, Connaught Centre, Hong Kong

Jardine Estn. Tst.	$HK209.90			3.40
Jardine J'pn. Fd.*	$HK274.92			1.10
Jardine S.E.A.	$US11.79			2.60
Jardine Flem. Int.†	$HK8.93			—

NAV Jan. 31 *Equivalent $US59.77
Next sub. Feb. 15.

Kemp-Gee Management Jersey Ltd.
1 Charing Cross, St. Helier, Jersey. 0534 73741

Kemp-Gee Capital	84.1	86.7		—
Kemp-Gee Income	65.9	67.9		8.22

Keyselex Mngt. Jersey Ltd.
PO Box 98, St. Helier, Jersey. (Eng. 01-606 7070)

Fonselex	Fr.1,329	1,443		3.10
Keyselex Int'l	£5.90	6.54		4.50
Keyselex Europe	£3.84	4.25		3.88
Japan Gth. Fund	$21.02	22.61		—
Keyselex Japan	£8.56	9.35	-0.04	8.71
Cent. Assets Cap.		£130.75	+0.02	—

King & Shaxson Mgrs.
1 Charing Cross, St. Helier, Jersey.
1 Thomas Street, Douglas, Isle of Man

Gilt Fund (Jersey)	10.00	10.06		11.25
Gilt Trust (I.o.M.)	116.60	119.60		11.25
Intl. Govt. Secs. Tst.				
First Sterling	16.66	16.71		—
First Intl.	$178.97	179.25		—

Kleinwort Benson Limited
20, Fenchurch St., EC3 01-623 8000

Eurinvest, Lux. F.		1,025	+0.05	4.88
Guernsey Inc.	57.8	61.6		4.23
Do. Accum.	70.4	75.1		4.23
KB Far East Fd.		$US9.56		1.46
KB Intl. Fund		$US10.47		1.91
KB Japan Fund		$US26.52		0.60
K.B. U.S. Gwth. Fd.		$10.21		—
Signet Bermuda		$US4.21	-0.04	1.90
*Unifonds DM	18.45	19.40	-0.10	8.76

*KB act as London paying agents only.

Lloyds Bk. (C.I.) U/T Mgrs.
P.O. Box 195, St. Helier, Jersey. 0534 27561

Lloyds Tst. O'seas	48.0	50.5		2.71

Next dealing date March 15.

Lloyds International Mgmnt. S.A.
7 Rue du Rhone, P.O. Box 179, 1211 Geneva 11

Lloyds Int. Growth	SF299.50	[illegible]		1.70
Lloyds Int. Income	SF304.00	[illegible]		6.30

M & G Group
Three Quays, Tower Hill EC3R 6BQ. 01-626 4588

AtlanticEx Feb. 14	$US2.49	2.72		—
Aust. Ex. Feb. 15	$US1.20	2.08		—
Gold Ex. Feb. 15	$US9.73	10.92		—
Island	106.1	112.9		13.88
(Accum. Units)	148.2	157.7	-0.1	13.88

Samuel Montagu Ldn. Agts.
114, Old Broad St., E.C.2. 01-588 6464

Apollo Fd. Feb. 15	SF44.20	47.95		3.90
Japfest Feb. 15	$HK9.16	9.80	-0.12	1.30
117 Grp. Feb. 8	$US11.21	11.15		2.12
117 Jersey Feb. 8	£4.55	4.97	+0.12	0.84
117JrsyO's Feb. 1	£9.40	9.90		—

Murray, Johnstone (Inv. Adviser)
163, Hope St., Glasgow, C2. 041-221 5521

*Hope St. Fd.	$US28.17		+0.76	—
*Murray Fund	$US9.31		+0.30	—

*NAV Jan. 31.

Negit S.A.
10a Boulevard Royal, Luxembourg

NAV Feb. 10	$US10.22			—

Negit Ltd.
Bank of Bermuda Bldgs., Hamilton, Bmda.

NAV Feb. 3	£3.94	£3.94		—

Old Court Fund Mngrs. Ltd.
P.O. 58, St. Julians Ct., Guernsey. 0481 26331

Eq. Fr. Jan. 31	48.3	51.1		2.65
Inc. Fd. Feb. 1	156.2	165.5		6.59
Intl. Fd. Feb. 15	86.5	92.0		—
Sm. Co Fd. Jan. 31	140.4	149.3		3.22

Old Court Commodity Fd. Mgrs. Ltd.
P.O. Box 58, St. Julian's Ct, Guernsey 0481 26741

O.C. Comdty. Tst.*	121.3	129.0		5.00
O.C. Dllr. Cm. Tst.†	$24.49	26.05		—

*Prices on Feb. 14. Next dealing Feb. 28.
†Price on Feb. 7. Next dealing date Feb. 21.

Phoenix International
PO Box 77, St. Peter Port, Guernsey.

Inter-Dollar Fund	$US2.22	2.38	-0.02	—

Property Growth Overseas Ltd.
28 Irish Town, Gibraltar (Gib.) 6106

U.S. Dollar Fund	$US88.27			—
Sterling Fund	£126.80			—

Royal Trust (CI) Fd. Mgt. Ltd.
P.O. Box 194, Royal Tst. Hse., Jersey. 0534 27441

R.T. Int'l. Fd.	$US9.16	9.55		3.00
R.T. Int'l. (Jsy.) Fd.	84	88		3.21

Prices at Feb. 15. Next dealing March 15.

Save & Prosper International
Dealing to:
37 Broad St., St. Helier, Jersey 0534-20591

U.S. Dollar-denominated Funds				
Dir. Fxd. Int.*†	9.35	9.94		7.04
Internat. Gr.*†	6.10	6.60		—
Far Eastern*†	33.42	36.15		—
North American*†	3.44	3.72		—
Sepro**†	12.66	14.16		—
Sterling-denominated Funds				
Channel Capital*‡	206.5	219.5	-0.5	1.82
Channel Islands*‡	139.6	147.0		5.07
Commodity***	114.2	120.3		—
St. Fxd. Int.***	119.0	125.9		11.06

Prices on *Feb. 13. **Feb. 15. ***Feb. 16.
‡Weekly Dealings.

Schlesinger International Mngt. Ltd.
41, La Motte St., St. Helier, Jersey. 0534 73588.

S.A.I.L.	74	79	-1.0	9.18
S.A.O.L.	£0.80	0.85	-0.01	4.71
Gilt Fd.	24.1	24.3	-0.2	11.72
Intl. Fd. Jersey	94.0	99.0	-1.0	3.71
Intnl. Fd. Lxmbrg.	$9.44	9.94	-0.07	—

Schroder Life Group
Enterprise House, Portsmouth. 0705 27733

International Funds				
£Equity	103.4	109.9		—
$Equity	113.3	120.5		—
£Fixed Interest	139.7	148.6		—
$Fixed Interest	102.9	109.4		—
£Managed	121.4	129.2		—
$Managed	108.1	114.9		—

J. Henry Schroder Wagg & Co. Ltd.
120, Cheapside, E.C.2. 01-588 4000

Cheap $ Feb. 16	$US10.49		-0.13	2.67
Trafalgar Jan. 31	$US107.16			—
Asian Fd. Feb. 6	[illegible]	13.52		3.67
Darling Fnd.	$A1.76	1.87		5.00
Japan Fd. Feb. 10	$US5.62	6.08		0.17

Sentry Assurance International Ltd.
P.O. Box 326, Hamilton 5, Bermuda

Managed Fund	$US4.971	5.378		—

Singer & Friedlander Ldn. Agents
20, Cannon St., EC4. 01-248 9646

Dekafonds	DM25.15	26.50	-0.10	6.42
Tokyo Tst. Feb. 1	$US30.00			2.00

Surinvest (Jersey) Ltd. (x)
P.O. Box 98, St. Helier, Jersey. 0534 73673

American Ind. Tst.	£6.74	6.88	-0.04	1.48
Copper Trust	£9.98	10.20	-0.01	—
Jap. Index Tst.	£8.75	8.93	+0.04	—

Surinvest Trust Managers Ltd. (x)
48, Athol Street, Douglas, I.o.M. 0624 23914

The Silver Trust	98.6	101.0	+0.1	—
Richmond Bond 97.	186.4	196.2	-1.3	10.24
Do. Platinum Bd.	112.2	118.1	-0.4	—
Do. Gold Bd.	99.3	104.5		—

TSB Unit Trust Managers (C.I.) Ltd.
Bagatelle Rd., St. Saviour, Jersey. 0534 73494

Jersey Fund	43.5	45.8		4.19
Guernsey Fund	43.5	45.8		4.19

Prices on Feb. 8. Next sub. day Feb. 15.

Tokyo Pacific Holdings N.V.
Intimis Management Co. N.V., Curacao
NAV per share Feb. 13. $US43.20

Tokyo Pacific Hldgs. (Seaboard) N.V.
Intimis Management Co. N.V., Curacao
NAV per share Feb. 13. $US31.49

Tyndall Group
P.O. Box 1256 Hamilton 5, Bermuda. 2-2760

Overseas Feb. 15	$US0.99	1.04		6.00
(Accum. Units)	$US1.52	1.61		—
3-Way Int. Jan. 19.	$US2.45	2.65		—
2 New St., St. Helier, Jersey 0534 37331/3				
TOFSL Feb. 15	£6.30	6.70		6.00
(Accum. Shares)	£9.75	10.35		—
TASOF Feb. 15	76.5	80.5		—
(Accum. Shares)	76.5	80.5		—
Jersey Fd. Feb. 15	191.0	202.6		7.00
(Non-J. Acc. Uts.)	262.6	278.4		—
Gilt Fund Feb. 15	110.4	112.4		10.60
(Accum. Shares)	138.8	141.2		—
Victory House, Douglas, Isle of Man. 0624 25029				
Managed Jan. 19	127.2	134.0		—

Utd. Intnl. Mngmnt. (C.I.) Ltd.
14, Mulcaster Street, St. Helier, Jersey.

U.I.B. Fund	$US100			8.25

United States Tst. Intl. Adv. Co.
14, Rue Aldringer, Luxembourg.

U.S. Tst. Inv. Fnd.	$US9.54		-0.06	0.95

Net asset February 16.

S. G. Warburg & Co. Ltd.
30, Gresham Street, EC2 01-600 4555

Cnv. Bd. Fd. Feb. 16	$US9.41			—
Eng. Int. Feb. 16	$US15.29		0.05	—
Gr. St. $Fd. Jan. 31	$US6.47			—
Mer. Eur. Fd. Feb. 15	$US10.75	11.15		—

Warburg Invest. Mngt. Jrsy. Ltd.
1, Charing Cross, St. Helier, Jsy. CI 0534 73741

CMF Ltd. Jan. 27	$US11.77	12.08		—
CMT Ltd. Jan. 27	£11.48	11.77		—
Metals Tst. Feb. 16	£10.93	11.20		—
TMT Feb. 9	$US9.26	9.58		—
TMT Ltd. Feb. 9	£9.13	9.37		—

World Wide Growth Management♦
10a, Boulevard Royal, Luxembourg.

Worldwide Gth. Fd.	$US12.79		-0.02	—

NOTES

Prices do not include $ premium, except where indicated ‡, and are in pence unless otherwise indicated. Yields % (shown in last column) allow for all buying expenses. a Offered prices include all expenses. b To-day's prices. c Yield based on offer price. d Estimated. g To-day's opening price. h Distribution free of U.K. taxes. p Periodic premium insurance plans. s Single premium insurance. x Offered price includes all expenses except agent's commission. y Offered price includes all expenses if bought through managers. z Previous day's price. ♥ Net of tax on realised capital gains unless indicated by ♦. ¶ Guernsey gross. # Suspended. ♦ Yield before Jersey tax. † Ex-subdivision.

I.G. Index Limited 01-351 3466.
29 Lamont Road, London SW10 0HS.

Three month Copper 637½-643

CLIVE INVESTMENTS LIMITED
1 Royal Exchange Ave., London EC3V 3LU. Tel.: 01-283 1101
Index Guide as at 7th February, 1978 (Base 100 at 14.1.77.)

Clive Fixed Interest Capital	135.06
Clive Fixed Interest Income	123.17

CORAL INDEX: Close 457-462

INSURANCE BASE RATES

† Property Growth	7½%
Cannon Assurance	4½%
† Vanbrugh Guaranteed	7.125%

† Address shown under Insurance and Property Bond Table.

FT SHARE INFORMATION SERVICE

**BRITISH FUNDS

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.

"Shorts" (Lives up to Five Years)

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
14J 14Ju	Treasury 10½pc '78‡‡	101⅞	9.12	10.31	5.69
26M 26S	Exch. 5pc '76-78‡‡	99⅛xd	22.8	5.04	5.62
9M 9S	Treasury 11½pc '79‡‡	103½xd	31.1	11.07	7.53
17M 17S	Treasury 3pc '79‡‡	95¼xd	8.2	3.10	5.17
26M 26S	Electric 4¼pc '74-79	97¾xd	22.8	4.35	5.74
1M 1S	Treasury 10½pc '79‡‡	103¼	26.9	10.17	8.37
15M 15N	Electric 3½pc '76-79	95⅞	10.10	3.65	6.03
3M 3S	Treasury 9pc 1980‡‡	101⅝xd	25.1	8.86	8.12
14M 14N	Treasury 9½pc '80‡‡	101½	10.10	9.35	8.63
15J 15D	Treasury 3½pc '77-80	94	6.11	3.73	6.32
15J 15D	Funding 5¼pc '78-80‡‡	95½	2.11	5.50	7.39
25M 25N	Exchequer 13pc 1980‡‡	107⅝	19.10	12.08	9.73
15J 15Ja	Treasury 11½pc 1981‡‡	104½	9.12	11.02	9.72
15F 15A	Treasury 3½pc 1979-81	90½	9.1	3.87	7.08
1A 1O	Treasury 9¾pc 1981‡‡	100¼	25.8	9.73	9.64
12J 12D	Exch. 8¼pc 1981	96¼	—	8.55	9.49
4F 4A	Exch. 9¼pc 1981	99¾	29.12	9.52	9.59
21F 21A	Exch. 3pc 1981	87¾xd	16.1	3.42	7.01
17M 17S	Treas. Variable '81‡‡	96⅝	11.10	6.68	7.48
23M 23N	Exch. 12¾pc 1981‡‡	108⅜	17.10	11.77	10.00
15J 15Ja	Treas. 8¼pc '80-82‡‡	96½	9.12	8.81	9.57
15F 15A	Treasury 3pc '82‡‡	85⅞	9.1	3.50	7.13
16M 16S	Treasury 14pc '82‡‡	112¾xd	7.2	12.42	10.11
15J 15D	Treas. Variable '82‡‡	95⅜	8.11	6.73	7.57
5J 5Ju	Treasury 8¼pc '82	94⅝	1.12	8.71	9.73
22M 22S	Exch. 9¼pc 1982	97¾xd	13.2	9.46	9.87

Five to Fifteen Years

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
21F 21A	Exch. 3pc '83	82⅝xd	16.1	3.63	7.20
17M 17S	Treasury 12pc 1983‡‡	106⅝xd	8.2	11.17	10.10
18J 18Ju	Treasury 9½pc '83	97⅝	12.12	9.56	10.04
15J 15Ja	Funding 5½pc '82-84‡‡	86	9.12	6.44	8.70
10J 10Ju	Treasury 8½pc '84-86‡‡	93½	5.12	9.19	9.83
1M 1N	Funding 6½pc '85-87‡‡	84½	26.9	7.91	9.45
26J 26Ja	Treasury 7¾pc '85-88‡‡	85½	30.12	9.12	10.19
1J 1Ju	Transport 3pc '78-88	64⅝	25.11	4.69	8.24
15A 15O	Treasury 5pc '86-89	70½	8.9	7.28	9.49
15J 15Ja	Treasury 13pc 1990‡‡	109¾	9.12	11.99	11.66
15J 15D	Treasury 8¼pc '87-90‡‡	85¼	6.11	9.87	10.57
10J 10Ja	Treasury 11¾pc 1991	101	5.12	11.79	11.79
5A 5O	Funding 5¾pc '87-91‡‡	70½	1.9	8.42	10.17
22J 22Ja	Treasury 12¾pc '92‡‡	106¾	16.12	12.06	11.89
21F 21A	Treasury 10pc 1992	89¼xd	16.1	11.21	11.56
25F 25A	Exch. 12¼pc '92	102¼xd	19.1	11.98	11.92

Over Fifteen Years

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
14J 14Ju	Treasury 12½pc '93‡‡	105⅛	8.12	12.04	11.95
15M 15S	Funding 6pc 1993‡‡	65½xd	6.2	9.15	10.54
25M 25N	Treasury 13¾pc 1993‡‡	114¼	17.10	12.35	12.10
1M 1S	Treasury 14½pc '94‡‡	116¾xd	23.1	12.41	12.10
22F 22A	Exch. 12½pc 1994	103½xd	16.1	12.07	12.01
17M 17N	Treasury 9pc '94‡‡	85¾	11.10	10.79	11.21
25Ju 25Ja	Treasury 12pc '95	101½	19.12	11.93	11.91
1M 1N	Gas 3pc '90-95	49	26.9	6.24	8.96
21Ja 21J	Exch. 10¼pc '95 (£20pd)	25	—	11.44	11.65
15M 15N	Treasury 12¾pc '95‡‡	108¼	10.10	12.11	12.00
15M 15S	Treasury 9pc '92-96‡‡	82⅛xd	6.2	10.89	11.27
3M 3S	Treasury 15¼pc '96‡‡	126	27.9	12.56	12.27
15M 15N	Exchequer 13¼pc '96‡‡	112¼	10.10	12.19	12.05
1A 1O	Redemption 3pc 1986-96	47⅛	25.8	6.46	8.97
22J 22Ja	Treasury 13¼pc '97‡‡	109⅞	16.12	12.18	12.05
21F 21A	Exchequer 10½pc 1997	91xd	16.1	11.54	11.69
1M 1S	Treasury 8¾pc 1997‡‡	79¾xd	23.1	10.95	11.51
1M 1S	Treasury 6¾pc '95-98‡‡	67¼	26.9	10.28	11.02
30M 30S	Treas. 15½pc '98‡‡	130¼	24.8	12.49	12.25
15J 15Ja	Treasury 9½pc 1999‡‡	86¼	9.12	11.14	11.35
19M 19N	Treasury 10½pc 1999	91⅝	—	11.58	11.70
14J 14Ju	Funding 3½pc '99-04	39¾	8.12	8.89	10.12
5A 5O	Treasury 8pc '02-06‡‡	76½	1.9	10.91	11.09
10J 10Ju	Treasury 5½pc '08-12‡‡	51⅞xd	1.2	10.55	10.81
26J 26Ja	Treasury 7¾pc '12-15‡‡	71⅞	20.12	10.87	10.95

Undated

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
1F 1A	Consols 4pc	35¼	28.12	11.42	—
1J 1D	War Loan 3½pc‡‡	36⅛	25.10	9.90	—
1A 1O	Conv. 3½pc '61 Aft.	38	25.8	9.55	—
5A 5O	Treasury 3pc '66 Aft.	27	1.9	11.60	—
5Ja.A.Ju.O	Consols 2½pc	22⅝	1.12	11.21	—
1A 1O	Treasury 2½pc	22½	25.8	11.61	—

**INTERNATIONAL BANK

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
15F 15A	5pc Stock '77-82	87	6.1	5.75	8.53

**CORPORATION LOANS

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
1F. 1A	Birmingham 9¼pc '79-81	97	5.1	9.54	10.28
1My 1N	Bristol 7¾pc '79-81	91¾	14.10	8.47	10.56
27M 27S	G.L.C. 12½pc '82	104¾	25.10	11.94	11.07
10F 10Aug	Do. 12½pc 1983	105	10.1	11.91	11.28
15My 15N	Glasgow 9¼pc '80-82	95¼	19.10	9.69	10.52
22M 22S	Herts 5½pc '78-80	91½	24.10	5.72	9.37
1Ap 1Oct	Liverpool 5¾pc '76-78	98¾	1.9	5.82	7.78
15M 15S	Do. 9¼pc '80-84	92¼	17.10	10.25	10.85
1J.A.J.O	Do. 3½pc Irred.	29½	1.12	12.20	—
10F 10A	Lon. Corp. 6½pc '75-78	99½	10.1	6.53	7.35
1A 1O	Do. 9½pc '84-85	97½	1.9	9.62	10.37
25F 28Aug	L.C.C. 6pc '76-79	95¾xd	30.1	6.27	9.05
15M 15S	Do. 5½pc '77-81	90¾xd	15.2	6.05	8.69
15J 15J	Do. 5½pc '82-84	81	15.12	6.63	9.63
1J 1D	Do. 5½pc '85-87	73	11.11	7.63	10.21
10J 10J	Do. 6¾pc '88-90	73½	12.12	9.26	10.75
1M.J.S.D	Do. 3pc '20 Aft.	25¼xd	1.2	11.95	—
15M 15S	Middx. 5¾pc 1980	92¼xd	15.2	5.66	9.12
10Mr. 10S	Newcastle 9¾pc '78-80	98¼xd	10.2	9.39	9.90
15M 15N	Warwick 12¼% 1980	105½	14.10	11.85	10.12

COMMONWEALTH & AFRICAN LOANS

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
1A 1O	**Aust. 5½pc '75-78	100¾	31.8	5.57	7.61
1J 1J	**Do. 5½pc '77-80	95⅛	30.11	5.82	8.74
1A 1O	**Do. 5½pc '81-82	87¼	31.8	6.45	9.95
1J 1D	**N.Z. 4pc 1976-78	97¼	11.11	4.12	7.78
28F 28A	**Do. 6pc '76-80	93⅝xd	30.1	6.40	9.39
15J 15D	**Do. 7½pc '83-86	86¾	12.11	8.77	10.11
1J 1N	Sth. Africa 9½pc '79-81	95	27.9	10.52	12.85
1A 1O	Sth. Rhod. 2½pc '65-70	63	3.66	—	—
15J 15J	Do. 6pc '78-81	89	12.65	—	—

LOANS

Public Board and Ind.

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
1J 1J	Agric. Mt. 5pc '59-89	59	1.12	8.56	11.71
30J 31D	Alcan 10½pc '89-94	89	14.11	12.12	12.42
1M 1S	Met. Wtr. 3pc 'B'	31⅞xd	1.2	9.40	11.08
30J 31D	U.S.M.C. 9pc 1982	110	14.11	8.35	6.95
30J 31D	Do. without Warrants	92¾	31.12	9.94	11.80
30A 31O	Ultramar 7pc '75-78	99¾	3.10	7.27	12.25

Financial

Interest Due	Stock	Price £	Last xd	Yield Int.	Red.
30J 30J	**FFI 13pc '81	105½	30.12	12.31	10.76
15M 15S	Do. 14pc '79	103½	17.10	13.51	11.30
30J 30D	Do. 14pc '82	109½	21.11	13.04	12.19
31Mr 30S	ICFC 5½pc Deb. '80-82	80xd	13.2	6.88	11.20
31My 30S	Do. 6½pc Deb. '81-84	78	31.10	8.21	11.40
11J 11J	Do. 10¾pc Uns. Ln. '86	96	5.1	11.10	11.48
11J 11J	Do. 11pc Uns. Ln. '88	96½	3.1	11.58	11.89
11J 11J	Do. 11¾pc Uns. Ln. '90	99	3.1	12.06	12.20
30Je 31D	Do. 7¾pc A Deb. '89-92	67½	14.11	11.05	12.35
31Mr 30S	Do. 7¼pc A Db. '91-94	64½xd	13.2	11.24	12.30
31Mr 30S	Do. 9pc A '91-94	77xd	13.2	11.69	12.30
28F 31A	Do. 8¾pc Ln. '92-97	75xd	16.1	11.85	12.30

FOREIGN BONDS & RAILS

Interest Due	Stock	Price £	Last xd	Div. % Gross	Red. Yield
—	Antofagasta Rly.	19	8.73	—	—
1J 1J	Do. 5pc Pref.	23	28.11	5—	—
1J 1J	Chilean Mixed	93	3.1	3	£3.07
1J 1O	German Yng. 4½pc	360	1.12	4½	—
1M 1S	Greek 7pc Ass.	47	1.11	£7.61	£7.61
1F 1A	Do. 6pc '28 Stab. Ass.	47xd	1.2	6	£6.40
1A 1O	Do. 4pc Mixed Ass.	43	3.10	4	£4.68
May 1	Hung. '24 Ass.	42	1.5	4½	6.66
30J 31D	Iceland 6½pc '83-88	74	29.11	—	10.90
10J 10J	Ireland 7½pc '81-83	87¼	12.12	10.85	10.99
1M 1S	Do. 9¾pc '91-96	83⅛xd	15.2	11.92	12.00
1J 1J	Japan 4pc '10 Ass.	290	1.12	—	—
30J 31D	Do. 6pc '83-88	87	5.1	6	7.90
1A 1O	Peru Ass. 3pc	160	3.10	3	1.90
30J 31D	S.G.I. 6½pc 1980	75	3.1	6½	8.02
May 1	Turin 9pc 1991	596½	2.5	9	9.33
15A 15O	Turin 6½pc 1984	DM81	17.10	6½	10.35
1F.M.A.N.	Uruguay 3½pc	94xd	1.2	3½	3.80

U.S. $ & DM prices exclude inv. $ premium

AMERICANS

Dividends Paid	Stock	£	Last xd	Div. Gross	Cvr	Yld Gr's
Apr. Oct.	ASA	14½	10.11	60c	—	3.1
September	AMF 5% Conv. '81	60⅝	15.9	5%	—	£4.7
Ma.Ju.Se.De.	Amax $1	23	4.11	$1.75	—	4.3
J.A.J.A.	American Express	22½	30.12	$1.40	—	3.5
April	Amer. Medic. Int.	13	2.3	30c	—	1.3
December	Asarco Inc.	11½xd	1.2	40c	—	2.0
Se.Fe.My.Au.	Baker Intl. Corp. $1	31½xd	31.1	64c	—	1.2
Mr.Ju.S.D.	Barnes Grp. $6⅔	12½	28.11	90c	—	4.1
D.Mr.Ju.SP	Bendix Corp. $5	24	6.12	$2.28	—	5.4
M.Je.S.D.	Beth. Steel $8	14½xd	6.2	$1.00	—	4.0
Ja.Ap.Jy.O.	Brown'g Fer. c16⅔	699p	15.9	40c	—	3.2
F.My.Au.N.	Brunswick Corpn. $	10½	20.10	70c	—	3.8
Ap.Jy.O.Ja	Burroughs Corp. $5	42	29.12	$1.00	—	1.5
Mr.Ju.Se.De	CBS $2.50	30⅝	27.1	$2.40	—	4.5
J.Ap.Jy.O	C.P.C. $½	31⅛	29.12	$2.50	—	4.5
F.My.Au.N.	Caterpillar $1	34¾	19.10	$1.80	—	2.9
F.My.Au.N.	Chase M'htn. $12.5	19½xd	26.1	$2.20	—	6.3
Mr.Je.S.D.	Chesebrough $1	14½	26.11	94c	—	3.7
Mr.Jn.S.D.	Chrysler $6¼	883p	5.11	$1.00	—	6.4

AMERICANS—Continued

Dividends Paid	Stock	£	Last xd	Div. Gross	Cvr	Yld Gr's
Ap.Ju.O.Ja	Manf. Han. US$7.50	21⅝xd	7.1	$2.92	—	5.0
Ju.Ap.Jy.O	Morgan (JP) US$2.5	27½	14.12	$2.26	—	3.0
N.F.My.Au	Norton Simon Inc. $1	12½	1.11	76c	—	3.5
M.Jn.S.D.	Owens-Ill. $3.125	14½	2.11	h$1.06	—	4.1
Ju.Oc.J.A.	Quaker Oats US$5	14¼	20.12	$1.04	—	4.0
—	Reliance $0.25	18½	9.74	15c	—	—
J.A.J.O.	Rep. N.Y. Corp. $5	18⅞	12.12	$1.00	—	3.3
F.My.Au.N.	Rexnord $5	11⅛xd	9.3	80c	—	4.0
S.D.Mr.Ju.	Richdsn.-Mrrll $1¼	14½	7.2	90c	—	3.5
Mr.Ju.S.D.	Saul (B. F.) $1	280p	11.74	—	—	—
Mr.Je.S.D.	Shell Oil $1	20⅛xd	1.2	h$1.60	—	4.4
Mr.Je.S.Dec.	Singer ($10)	13⅛	16.11	60c	—	2.6
Au.N.F.My.	Sperry Rand $0.50	23xd	2.2	$1.12	—	2.8
Ja.Ju.Se.Dec	TRW Inc. $1¼	21xd	6.2	$1.80	—	4.9
Feb.My.Au.Nov	Tenneco	20¼	15.11	$2.00	—	5.6
June Dec.	Do. 10% Ln. Stk. 91-95	137	25.11	10%	—	7.4
J.Ap.Jy.O	Tesoro Pt. US$0.16⅔	638p	14.9	$1.00	—	8.8
Mr.Je.S.D.	Texaco $6.25	17⅝xd	1.2	$2	—	6.3
Mr.Ju.S.D.	Time Inc.	24⅞	22.11	$1.30	—	2.9
Ja.Ap.Ju.O	Transamerica $1	944p	28.12	80c	—	4.8
MarJnSpDc	Utd. Tech. $US5	24¼	24.8	$2.00	—	4.1
Mr.Je.S.D.	U.S. Steel $1	17⅞xd	6.2	$1.60	—	5.1
May Aug.	Vetco $0.50	14⅝xd	26.1	20c	—	0.8
Mr.Je.S.D.	Woolworths $3½	12½xd	26.1	$1.40	—	6.5
Ap.Jy.O.J.	Xerox Corp. $1	31⅛	29.11	$2.00	—	3.6
—	Xonics Inc. 10c	467p	—	7½c	—	0.9
O.Ja.Ap.Jy.	Zapata Corp. 25c	11½	6.1	s30c	—	1.5

S.E. List Premium 36½% (based on $US1.9445 per £)

Conversion factor 0.7350 (0.7440)

CANADIANS

Dividends Paid	Stock	£	Last xd	Div. Gross	Cvr	Yld Gr's
Ma.S.J.D.	Bk. Montreal $2	11⅞xd	27.2	$1.06	—	4.9
F.My.Au.N.	Bk. Nova Scotia $1	12¼	29.12	92c	—	3.8
A.Jy.O.Ja.	Bell Canada 25c	32⅞	14.12	$4.2	—	6.6
May Nov	Bow Valley	13	9.5	10c	—	0.4
Oct.	Brascan	930p	30.9	$1.00	—	5.5
F.My.Au.N.	Can. Imp. Bk. $2	15¾	29.12	$1.44	—	4.7
July Jan.	Can. Pacific $5	10⅝	29.12	97c	—	5.5
July Jan.	Do. 4pc Deb. £100	36½	14.11	4%	—	11.0
J.Ap.Jy.O.	Gulf Oil Can.	16½	29.12	$1.06	—	3.3
Ap.Jy.O.Ja.	Hawker Sid. Can.	345p	14.11	40c	—	5.9
F.My.Au.N.	Hollinger $5	18¾	27.11	$2.06	—	5.6
Apr. Oct.	Hudson's Bay	11½	5.9	65c	—	3.0
Jan. July	Hud. B. Oil G. $2½	26⅝	24.11	$1.60	—	3.1
Mr.Je.S.D.	Imperial Oil	11½	26.8	86.4c	—	3.9
Jan.Ap.J.O.	Inco	990p	4.8	$1.25	—	1.7
F.My.Au.N.	Int. Nat. Gas $1	650p	11.12	80c	—	6.3
Mr.Je.S.D.	Massey Fergn.	625p	24.11	—	—	—
June Dec.	Pacific Pet. $1	22	1.8	86.4c	—	2.0
—	Place Gas $1	34p	—	—	—	—
June Dec.	Rio Algom	15½	6.10	$1.08	—	5.4
M.Je.S.D.	Royal Bk. Can. $2	17⅛	21.10	$1.46	—	4.4
SeDeMr.Ju	Seagram Co. C$1	14⅝	28.11	92c	—	3.2
F.My.Au.N.	Tor. Dom. Bk. $1	10⅞	3.1	76c	—	3.7
J.Ap.Jy.O.	Trans Can. Pipe	890p	24.10	105c	—	6.4

S.E. List Premium 36½% (based on $2.1715 per £)

BANKS AND HIRE PURCHASE

Dividends Paid	Stock	Price	Last xd	Div. Net	Cvr	Y'ld Gr's	P/E
Jan. July	ANZ $A1	260	12.12	tQ16c	—	3.8	—
Apr. July	Alexanders D. £1	240	30.1	14.33	3.1	9.0	5.5
May Aug.	Algemene Fl. 100	£107	16.9	Q23%	2.5	3.4	7.6
Oct. Apr.	Allen Harvey £1	475	5.9	159.2	—	10.0	—
Dec. June	Allied Irish	158	31.10	tQ10.0	—	6.4	—
Jan. July	Arbuthnot L. £1	160	30.1	t9.25	—	8.8	—
July Nov.	Bank Amer. $1.565	£15	20.1	Q94c	—	3.5	—
July Jan.	Bk. Ireland £1	320	22.11	t13.25	—	6.2	—
Mar. Sept.	Do. 10pc Conv.	£144xd	15.2	Q10%	—	6.9	—
May Aug.	Bk. Leumi I£1	17	26.9	Q12.5%	—	2.6	—
Aug. Feb.	Bk. Leumi (UK) £1	160	30.1	7.5	1.5	7.0	14.3
Nov. July	Bk. N.S.W. $A2	420	12.12	Q30c	—	4.4	—
Nov. May	Bank Scotland £1	275	3.10	9.9	4.1	5.5	6.7
A.J.O.Ja.	Bankers N.Y. $10	£24½	27.2	Q$3.00	—	7.0	—
Apr. Oct.	Barclays £1	316	8.8	+10.04	4.9	4.6	6.3
Nov. July	Brown Shipley £1	205	28.11	t8.42	—	6.2	—
Jan. July	Cater Ryder £1	276	14.11	17.57	—	9.6	—
May Nov.	Clive Dis'nt 20p	73	17.10	d4.77	—	9.9	—
Feb. Sept.	Com'l Aus. ($A1)	193	3.10	tQ15c	2.6	5.1	7.5
May	Com'zbk DM100	£15¾	11.5	Q18%	—	3.1	—
March	Chgn. Hnk. Kr100	£16	9.3	Q12%	—	7.3	—
July Oct.	Corinthian 10p	19	5.73	20.2	—	1.6	—
May	Cred. France F75	£15¼	4.5	Q9.57%	—	4.2	—
Jan. Apr.	Dawes (G. R.)	67	16.10	—	—	—	—
May	Deutsche Bank DM50	£104½	—	Q20%	—	1.9	—
Jan. May	F.C. Finance	63	6.12	+1.52	7.1	3.7	17.4
—	First Nat. 10p	2¼	9.74	—	—	—	—
—	Do. Wrrts. 75-83	½	—	—	—	—	½
September	Fraser Ans. 10p	11¼	5.76	0.03	—	0.4	—

Hire Purchase, etc.

BEERS, WINES AND SPIRITS

BUILDING INDUSTRY, TIMBER AND ROADS

BUILDING INDUSTRY—Cont.

CHEMICALS, PLASTICS

CINEMAS, THEATRES AND TV

DRAPERY AND STORES

DRAPERY AND STORES—Cont.

ELECTRICAL AND RADIO

ENGINEERING MACHINE TOOLS

ENGINEERING—Continued

FOOD, GROCERIES, ETC.

HOTELS AND CATERERS

HOTELS—Continued

INDUSTRIALS (Miscel.)

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INSURANCE—Continued

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's	P/E
Jan. July	Sun Alliance £1	546	14.11	†12.32	—	5.3	—
June Dec.	Sun Life 5p	96	31.10	3.11	—	4.9	—
April	Taisho Mar. EDR	721	25.3	‡Q10%	—	0.7	—
Nov. May	Trade Indemnity	165	31.10	†7.64	—	7.0	—
Mr.Ju.Se.De.	Travelers $2.30	£19¾	30.1	Q$1.28	—	3.6	—
Dec. June	Willis Faber	270	17.10	†7.61	2.6	4.3	13.9

MOTORS, AIRCRAFT TRADES

Motors and Cycles

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's	P/E
—	Brit. Leyland 50p	25	—	—	—	—	—
Mr.Je.S.D.	Gen. Mts Units	195	11.10	18	1.7	8.0	7.3
Jan. July	Lotus Car 10p	40	675	—	—	—	—
August	Reliant Mtr. 5p	5½	775	—	—	—	7.9
Sept. May	Rolls-Royce Mtrs.	66	19.9	†3.9	2.3	9.0	6.8
May	Volvo Kr50	£105⅛	24.5	Q12%	0.6	7.0	24.3

Commercial Vehicles

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's	P/E
Nov. June	Crane Frueh. 10p	99	17.10	♦†2.18	1.9	3.3	23.9
Feb. Aug.	E.R.F. (Hldgs.)	119	16.1	h2.17	6.4	2.8	5.9
August	Fodens (50p)	63	25.7	$3.25	5.7	7.8	(25)
June Feb.	Peak Invests. 10p	10½	9.5	0.5	2.9	7.3	7.3
May Jan.	Plaxtons	128	3.1	d7.62	5.3	9.0	5.0
July Oct.	York Trailer 10p	64	22.8	t2.11	4.5	5.1	7.5

Components

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's	P/E
July Jan.	Abbey Panels	50	30.1	d2.64	♦	8.0	♦
Feb. July	Airflow Stream.	70	14.11	†4.47	3.5	9.7	4.5
May Nov.	Armstr'ng Eq. 10p	61	2.10	2.04	3.0	5.1	10.1
July Jan.	Assoc. Eng'g	119½	3.1	4.69	3.9	5.9	6.5
September	Automotive	93	22.8	1.86	8.8	3.0	6.0
Aug. Mar.	Bluemel Bros.	67	3.1	3.67	2.6	8.3	6.3
Oct. June	Brown Brok. 10p	24	3.10	t1.06	1.8	6.8	13.5
—	Dana Corp.	£16¼	—	Q$1.24c	3.7	4.3	8.3
Apr. Sept.	Dowty 50p	175xd	13.2	†4.21	3.7	3.6	11.2
Jan. July	Dunlop 50p	84	14.11	65.3	3.6	9.6	4.4
Jan. June	Flight Refuelling	104	31.10	2.59	4.0	3.8	10.1
Jan. June	Hrdn. Smith 10p	9½	14.11	0.25	1.0	4.0	43.2

TEAS

India and Bangladesh

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
December	Assam Dooars £1	190	31.10	♦9.51	5.9	7.6
—	Assam Frontier £1	305	—	♦h8.13	4.9	4.0
September	Assam Invs. £1	113	22.8	7.0	3.7	9.3
Mar. Sept.	Empire Plants 10p	22	17.10	♦1.98	1.6	13.6
November	Jokai £1	245	14.11	12.0	3.5	7.4
January	Longbourne £1	252	31.10	10.0	6.8	6.0
November	McLeod Russel £1	218	17.10	10.0	2.7	7.0
May Nov.	Moran £1	410	19.9	15.08	4.9	5.6
Jan. June	Singlo Hldgs. 10p	23	28.11	♦F1.72	3.2	11.8
Apr. July	Warren Plants	189xd	13.2	F13.0	3.6	10.4
September	Williamson £1	138	22.8	9.0	4.7	9.9

Sri Lanka

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
Apr. Sept.	Lunuva £1	150	3.77	3.63	1.0	3.7

Africa

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
Nov. July	Blantyre £1	420	17.10	23.35	2.0	8.4
Feb. Oct.	Ruo Estates £1	150	3.10	13.0	♦	14.1

MINES

CENTRAL RAND

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
—	Durban Deep R1	373	6.75	—	—	—
Aug. Feb.	East Rand Prp. R1	359	28.6	‡Q5c	16.4	‡
Aug. Feb.	Randfontein Est. R2	£33½	12.12	Q250c	3.5	6.3
Aug. Feb.	West Rand R1	150	3.1	Q13c	♦	5.2

EASTERN RAND

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
Mar. Nov.	Bracken R1	81	19.9	Q25c	1.5	18.4
February	[illegible]	29	3.1	†Q20c	—	—
—	[illegible]	300	—	N25c	—	5.0
—	[illegible] Areas	140#	—	—	—	—
Aug. Feb.	[illegible]	151	3.1	Q24c	♦	10.9
May Nov.	Kinross R1	349	19.9	Q34c	1.8	5.8
Oct. Mar.	Leslie 65c	47½	19.9	Q3c	1.2	3.8
Aug. Feb.	[illegible]	89	3.1	Q46c	1.5	30.9
Aug. Feb.	S. African Ld. 35c	60	6.76	‡Q21½c	10.7	‡
Aug. Feb.	Viakfontein R1	54	3.1	Q25c	♦	27.7
May Nov.	Winkelhaak R1	670	19.9	Q86c	1.7	7.7
—	Wit. Nigel 25c	61½	6.74	—	—	—

FAR WEST RAND

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
Feb. Aug.	Blyvoor 25c	321	3.1	†Q46c	2.3	8.6
Feb. Aug.	Buffels R1	872	3.1	†Q30c	1.4	8.9
—	Deelkraal R0.20	98	—	—	—	—
Feb. Aug.	Doornfontein R1	290	3.1	†Q15c	5.1	3.1
Aug. Feb.	East Drie R1	660	3.1	Q78c	♦	7.1
—	Elsburg [illegible]	216	—	—	—	—
Feb. Aug.	[illegible] R	141	12.12	Q8½c	1.0	3.7
Feb. Aug.	Hartebeest R1	£10¾	3.1	†Q135c	1.5	7.5
Feb. Aug.	Kloof Gold R1	492	3.1	Q30c	2.3	3.6
Feb. Aug.	Libanon R1	534	3.1	†Q45c	3.2	5.0
February	Southvaal 50c	503	3.1	Q21c	♦	2.5
Aug. Feb.	Stilfontein 50c	262	3.1	Q22c	♦	5.0
Aug. Feb.	Vaal Reefs 50c	£12⅜	3.1	Q115c	♦	5.6
Feb. Aug.	Ventersp. R1	265	3.1	†Q5c	7.3	1.1
Feb. Aug.	W. Drie R1	£18¾	3.1	Q280c	1.6	8.9
Feb. Aug.	Western Areas R1	230	12.12	Q13c	2.5	3.4
Feb. Aug.	Western Deep R2	707	3.1	Q82.5c	♦	7.0
Feb. Aug.	Zandpan R1	195	3.1	†Q22c	1.0	6.7

O.F.S.

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
Sept. Feb.	Free State Dev. 50c	90xd	13.2	Q11c	1.4	7.4
Jan. Dec.	F.S. Geduld 50c	£14¼	3.10	Q240c	2.7	10.0
Jun. Dec.	F.S. Saaiplaas R1	67	9.75	—	—	—
May Oct.	Harmony 50c	387	3.10	†Q50c	4.7	7.7
—	Loraine R1	126	9.75	Q6c	0.5	2.8
Jun. Dec.	Pres. Brand 50c	934	3.10	Q130c	2.6	8.3
Jun. Dec.	Pres. Steyn 50c	724	3.10	Q20c	9.9	1.6
May Nov.	St. Helena R1	768	19.9	Q115c	2.5	8.9
—	Unisel	176	—	—	—	—
Jun. Dec.	Welkom 50c	244	3.10	Q35c	1.9	8.6
Jun. Dec.	W. Holdings 50c	£16¾	3.10	Q250c	1.5	10.0

FINANCE

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
Apr. Sept.	Ang. Am. Coal 50c	440	22.8	Q60c	♦	8.5
Jan. June	Anglo Amer. 10c	272	12.12	♦Q35c	2.0	7.2
Mar. Aug.	Anglo Am. Gold R1	£15¼xd	13.2	Q165c	♦	‡
Feb. Aug.	Anglovaal 50c	680	3.1	Q105c	3.4	9.2
Jan. July	Charter Cons.	126	28.11	17.5	1.8	9.2
May Dec.	Cons. Gold Fields	188	17.10	19.05	2.6	7.3
July Mar.	East Rand Con. 10p	22	12.1	1.0	1.5	7.0
Mar. Sept.	Gold Fields S.A. R1	248s	1.1	Q40c	1.5	9.6
Oct. Mar.	Gen. Mining R2	£14¼	19.9	Q210c	2.0	8.5
Mar. Sept.	Gold Fields S.A. 2½c	£11¾xd	13.2	Q110c	♦	5.6
Jan. Oct.	Johannesburg Cons. R2	£12	3.1	Q170c	2.2	8.4
Aug. Feb.	Middle Wit 25c	160	3.1	Q22c	1.3	8.4
Mar. Oct.	Minorco SBD1.40	137	5.9	Q12c	♦	4.9
Mar. Sept.	New Wits 50c	112xd	13.2	Q15c	0.6	8.0
—	Patino NV Fl. 2.5	955	11.75	QC50c	‡	3.1
November	Rand London 15c	56	17.10	hQ5c	3.0	5.3
Jan. July	Selection Trust	384	29.11	16.72	1.8	6.7
Aug. Feb.	Sentrust 10c	195	12.12	†Q28c	1.1	8.6
Feb. Oct.	Silvermines 2½p	33	3.10	3.5	2.0	10.3
July Jan.	Tanks Cons. 10p	£12⅛	28.11	Q95c	3.4	4.6
Mar. Sept.	U.C. Invest. R1	226	5.9	Q30c	♦	8.2
Mar. Nov.	Union Corpn. 62½c	277	19.9	Q36c	1.9	7.8

MINES—Continued

CENTRAL AFRICAN

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
Nov. May	Falcon Rh.50c	194	19.9	Q50c	1.3	24.0
May	Rhod'n Corp. 16½p	22	5.77	0.57	4.3	3.9
—	Roan Cons. K4	70	12.74	—	—	—
Dec. July	Tanganyika 50p	130	17.10	Q11.0	1.1	8.5
Jan. July	Do. Pref. 80p	78	12.12	Q9%	16.4	9.2
Nov. May	Wankie Col. Rh.1	40	17.10	Q7½c	1.4	16.0
—	Zam. Cpr. SBD0.24	11½	11.74	—	—	—

AUSTRALIAN

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
—	Acmex 25c	11	—	—	—	—
Nov. Apr.	Bougainville 50 Toea	80	13.3	Q8c	1.5	6.3
—	BH South 50c	72	9.74	—	—	—
Oct. May	Conzinc Riotinto 50c	160	24.3	Q10c	♦	3.9
—	G.M. Kalgoorlie $1	67	6.67	—	—	—
September	Hampton Areas 5p	88	25.7	1.45	4.1	2.5
—	Metals Ex. 50c	12	—	—	—	—
Dec. Apr.	M.I.M. Hldgs. 50c	131xd	13.2	Q9c	1.7	4.2
—	Mount Lyell 25c	19	—	—	—	—
—	Newmetal 10c	2	—	—	—	—
June Nov.	North B. Hill 50c	86	31.10	Q8c	1.5	5.7
—	Nth. Kalgurli	8½	—	—	—	—
June Nov.	Oakbridge $A1	140	7.4	Q11c	1.9	4.9
—	Pacific Copper	35	—	—	—	—
—	Pancont'l 25c	800	—	—	—	—
—	Paringa M&Ex.5p	12½	—	—	—	—
Apr. Oct.	Peko-Wallsend 50c	434	19.9	Q15c	4.0	2.1
—	Poseidon 50c	75#	—	—	—	—
Oct. May	Westn. Mining 50c	89	19.9	Q6c	1.4	4.2
—	Whim Creek 20c	40	—	—	—	—

TINS

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
Nov. Apr.	Amal. Nigeria	28	17.10	2.51	1.6	13.6
Apr. Oct.	Ayer Hitam SM1	270	5.9	Q416.7c	0.9	33.2
Apr. Oct.	Beralt Tin	51	8.8	3.75	2.3	11.1
Jan. July	Berjuntai SM1	218	3.1	‡Q60c	♦	‡
Feb. Oct.	Geevor	505	16.1	18.05	3.4	5.4
—	Gold & Base 12½p	9	10.73	—	—	—
July Dec.	Gopeng Cons.	265	30.1	15.0	♦	8.6
—	Hongkong	150	11.67	—	—	—
Mar. Sept.	Idris 10p	90	30.1	7.5	♦	12.6
—	Jantar 12½p	11	4.67	—	—	—
—	Kamunting SM0.50	69	—	Z015.5c	0.7	4.8
Jan. July	Killinghall	450	12.12	Q125	♦	27.8
January	Malay Dredging SM1	295	12.12	Q95.5c	0.8	7.0
—	‡Pahang	49	9.75	†Q2.5	0.5	5.1
July Jan.	Pengkalen 10p	53	30.1	6.5	♦	18.6
Jun. Nov.	Petaling SM1	170	12.12	‡Q12½c	10.9	1.6
Mar. Oct.	Saint Piran	60	3.1	g1.99	4.6	5.0
February	South Crofty 10p	58	3.1	b4.12	1.5	10.4
Jan. July	South Kinta SM0.50	150	3.1	tQ77.8c	1.4	11.1
June Jan.	Sthn. Malayan SM1	250	3.1	hQ131.3c	1.1	11.3
—	Sungei Besi SM1	152	—	—	—	—
—	Supreme Corp. SM1	64	9.74	ZQ10c	—	3.4
Mar. Aug.	Tanjong 15p	98	30.1	4.5	♦	7.0
Sept. Mar.	Tongkah Hrbr. SM1	74	12.12	Q6.57c	1.6	16.5
Apr. Oct.	Tronoh SM1	168	5.9	ZQ30c	2.0	3.8

COPPER

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
June Dec.	Messina R0.50	85	12.12	‡Q30c	1.9	‡

MISCELLANEOUS

Dividends Paid	Stock	Price	Last xd	Div Net	Cvr	Y'ld Gr's
—	Burma Mines 17½p	9	5.75	—	—	—
—	Colby Mines $C1	72	—	—	—	—
Aug. Feb.	Cons. Murch. 10c	240	3.1	Q30c	♦	‡
—	Northgate C$1	250	3.75	—	—	—
Jan. June	R.T.Z.	174	31.10	t8.5	q3.1	7.4
—	Sabina Inds. C$1	34	—	—	—	—
—	Tara Expln. $1	812	—	—	—	—
Nov. July	Tehidy Minerals 10p	45	17.10	1.21	2.5	4.1
October	Yukon Cons. C$1	123	15.9	Q7c	♦	3.4

NOTES

Unless otherwise indicated, prices and net dividends are in pence and denominations are 25p. Estimated price/earnings ratios and covers are based on latest annual reports and accounts and, where possible, are updated on half-yearly figures. P/Es are calculated on the basis of net distribution; bracketed figures indicate 10 per cent. or more difference if calculated on "nil" distribution. Covers are based on "maximum" distribution. Yields are based on middle prices, are gross, adjusted to ACT of 34 per cent. and allow for value of declared distributions and rights. Securities with denominations other than sterling are quoted inclusive of the investment dollar premium.

- Δ Sterling denominated securities which include investment dollar premium.
- ● "Tap" Stock.
- * Highs and Lows marked thus have been adjusted to allow for rights issues for cash.
- † Interim since increased or resumed.
- ‡ Interim since reduced, passed or deferred.
- ‡‡ Tax-free to non-residents on application.
- ♦ Figures or report awaited.
- †† Unlisted security.
- ş Price at time of suspension.
- ¶ Indicated dividend after pending scrip and/or rights issue: cover relates to previous dividend or forecast.
- ** Free of Stamp Duty.
- ♠ Merger bid or reorganisation in progress.
- ♣ Not comparable.
- ♠ Same interim, reduced final and/or reduced earnings indicated.
- § Forecast dividend; cover on earnings updated by latest interim statement.
- ‡ Cover allows for conversion of shares not now ranking for dividends or ranking only for restricted dividend.
- ☆ Cover does not allow for shares which may also rank for dividend at a future date. No P/E ratio usually provided.
- ♥ Excluding a final dividend declaration.
- ♦ Regional price.
- ‖ No par value.

a Tax free. b Figures based on prospectus or other official estimate. c Cents. d Dividend rate paid or payable on part of capital; cover based on dividend on full capital. e Redemption yield. f Flat yield. g Assumed dividend and yield. h Assumed dividend and yield after scrip issue. j Payment from capital sources. k Kenya. m Interim higher than previous total. n Rights issue pending. q Earnings based on preliminary figures. r Australian currency. s Dividend and yield exclude a special payment. t Indicated dividend: cover relates to previous dividend, P/E ratio based on latest annual earnings. u Forecast dividend: cover based on previous year's earnings. v Tax free up to 30p in the £. w Yield allows for currency clause. y Dividend and yield based on merger terms. z Dividend and yield include a special payment: Cover does not apply to special payment. A Net dividend and yield. B Preference dividend passed or deferred. C Canadian. D Cover and P/E ratio exclude profits of U.K. aerospace subsidiaries. E Issue price. F Dividend and yield based on prospectus or other official estimates for 1977-78. G Assumed dividend and yield after pending scrip and/or rights issue. H Dividend and yield based on prospectus or other official estimates for 1976-77. K Figures based on prospectus or other official estimates for 1978. M Dividend and yield based on prospectus or other official estimates for 1978. N Dividend and yield based on prospectus or other official estimates for 1979. P Dividend and yield based on prospectus or other official estimates for 1977. Q Gross. T Figures assumed. U No significant Corporation Tax payable. Z Dividend total to date. ‡‡ Yield based on assumption Treasury Bill Rate stays unchanged until maturity of stock.

Abbreviations: xd ex dividend; xc ex scrip issue; xr ex rights; xa ex all; xd ex capital distribution.

"Recent Issues" and "Rights" Page 25

This service is available to every Company dealt in on Stock Exchanges throughout the United Kingdom for a fee of £400 per annum for each security

REGIONAL MARKETS

The following is a selection of London quotations of shares previously listed only in regional markets. Prices of Irish issues, most of which are not officially listed in London, are as quoted on the Irish exchange.

Stock	Price	+ or −
Albany Inv. 20p	23	.....
Ash Spinning	42	.....
Bertam	16	.....
Bdg'wtr. Est. 50p	260	.....
Clover Croft	22	.....
Craig & Rose £1	400	.....
Dyson (R. A.)	40	.....
Ellis & McHdy.	68	.....
Evans Frk. 10p	58	.....
Evered	17	.....
Fife Forge	47	.....
Finlay Pkg. 5p	19	.....
Graig Ship. £1	212	−3
Higsons Brew.	83	.....
I.O.M. Stm. £1	150	.....
Holt (Jos.) 25p	245	.....
Nthn. Goldsmith	63	−3
Pearce (C. H.)	131	.....
Peel Mills	17	.....
Sheffield Brick	47	.....
Sheff. Refrshmt.	51	.....
Shiloh Spinn.	19	.....
Sindall (Wm.)	85	.....

IRISH

Stock	Price	+ or −
Conv. 9% '80/82	£95⅞xd	.....
Alliance Gas	80	.....
Arnott	285	−15
Carroll (P.J.)	100	.....
Clondalkin	82	.....
Concrete Prods.	130	.....
Heiton (Hldgs.)	49xd	.....
Ins. Corp.	162	.....
Irish Ropes	130	.....
Jacob	60	.....
Sunbeam	31	+1
T.M.G.	185	+5
Unidare	75	−2

OPTIONS
3-month Call Rates

Industrials					
A. Brew	6½	I.C.I.	23	Tube Invest.	30
A.P. Cement	18	Imps	7	Unilever	40
B.S.R.	9	I.C.L.	20	Utd. Drapery	7½
Babcock	10	Inveresk	7	Vickers	15
Barclays Bank	25	K.C.A.	5	Woolworths	6
Beecham	38	Ladbroke	17	**Property**	
Boots Drug	15	Legal & Gen.	14	Brit. Land	3¾
Bowaters	16	Lex Service	7	Cap. Counties	5
B.A.T.	24	Lloyds Bank	22	E.P.	5
British Oxygen	6	"Lots"	5	Intreuropean	4
Brown (J.)	20	London Brick	5	Land Secs.	18
Burton 'A'	15	Lonrho	7	MEPC	12½
Cadburys	5	Lucas Inds.	25	Peachey	10
Courtaulds	10	Lyons (J.)	13	Samuel Props.	10
Debenhams	10	"Mams"	7	Town & City	2
Distillers	13	Mrks. & Spncr.	11	**Oils**	
Dunlop	8½	Midland Bank	25	Brit. Petroleum	35
Eagle Star	11	N.E.I.	20	Burmah Oil	7
E.M.I.	18	Nat. West. Bank	22	Charterhall	3½
Gen. Accident	17	Do. Warrants	10	Shell	28
Gen. Electric	18	P&O Dfd.	10	Ultramar	22
Glaxo	40	Plessey	9	**Mines**	
Grand Met.	9	R.H.M.	5	Charter Cons.	12
G.U.S. 'A'	18	Rank Org. 'A'	18	Cons. Gold	20
Guardian	18	Reed Intl.	14	Rio T. Zinc	16
G.K.N.	22	Spillers	4		
Hawker Sidd.	20	Tesco	4		
House of Fraser	12	Thorn	22		
		Trust Houses	15		

FINANCIAL TIMES
Monday February 20 1978

Callaghan in Ulster security talks after bomb carnage

BY OUR BELFAST CORRESPONDENT

MR. ROY MASON, the Northern Ireland Secretary, had consultations with the Prime Minister yesterday about security in Ulster, following the restaurant bombing which killed 12 people and injured 30.

The Provisional IRA last night admited responsibility for bombing the La Mon House restaurant at Comber, County Down.

Meanwhile, Mr. Jack Lynch, the Republic's Prime Minister, denied suggestions by the Northern Ireland peace movement that IRA attacks are mounted from south of the border.

A statement in the Commons is expected from Mr. Mason today after his talks with Mr. Callaghan and senior Cabinet members, including Mr. Fred Mulley, Defence Secretary, and Mr. Merlyn Rees, the Home Secretary.

Late warning

The heavy death toll was clearly the result of a bombing raid which went wrong. The attempt to destroy yet another popular nightspot became a nightmare because bomb warnings came too late for anyone to be evacuated.

The gruesome task of identifying the victims continued yesterday as the wave of revulsion spread. The bomb was of the blast incendiary type, used by the Provos with increasing frequency.

The Royal Ulster Constabulary said *cans of petrol* were strapped to the bomb, which had been placed at a window in the restaurant. Most of the victims died in the blaze which quickly engulfed the room at the restaurant where members of the Irish Collie Club were meeting.

Shock tactics

Police yesterday distributed thousands of leaflets showing the charred remains of a woman caught in the inferno, in a bid to shock the public into giving information

Twenty suspected Provisional IRA members were still being questioned in Belfast. They were arrested in a swoop after the explosion, but the RUC admitted that none were suspected of being directly involved. One of them is Gerry Adams, reputed to be the top Republican in Belfast.

A team of 100 detectives began the task of eliminating every stranger seen near the restaurant before the blast. They believe they have found the bombers' getaway car: it was stolen in a Republican area of Belfast.

Pope Paul joined politicians and other church and community leaders who reacted swiftly to the tragedy. A Vatican spokesman said the Pope had expressed his sorrow and grief about the bombing and other recent killings in Ulster.

Leaders of Ulster's Protestant paramilitary groups were meeting to-day. The danger of revenge attacks by Protestant extremists is not thought to be strong, because the restaurant bombing, unlike other mass murders in Ulster was not blatantly sectarian.

Giles Merritt in Dublin writes: Referring to a charge made here by Peace Movement leader Mrs Betty Williams that his recent remarks on Irish unity had given the IRA "the go-ahead to continue their campaign," the Irish premier said the Peace Movement should not enter into controversial politics.

Mrs. Williams had also implied that the Republic was a haven for Provo terrorists, and Mr. Lynch rebutted that suggestion: "I am absolutely satisfied that the IRA's campaigns are not directed from Dublin."

The Provisionals' attacks, he added, were "planned, generated and perpetrated in the North." He had been told by the British Government that only 2 per cent. of Ulster violence originated from border areas.

Earlier, Mr. Lynch had described the La Mon bombers as "callous beasts." There seems little doubt that the attack has had a moderating effect on discussions this week-end of the Ulster question at Mr. Lynch's Fianna Fail Party's annual conference.

'Think tank'

The expected forthright debate on reunification was dampened by the news of the tragedy. The Prime Minister's own keynote speech nevertheless concentrated on the Ulster problem, and Mr. Lynch announced that he is setting up a "think tank" study group on Ulster policy and the implications of reunification.

He had been expected to reveal that a White Paper was being prepared, but he explained to the 7,000 delegates that an in-depth study would be "a necessary prerequisite to drawing up a White Paper."

Cabinet meets to discuss Budget measures

By Rupert Cornwell, Lobby Staff

THE CABINET yesterday spent more than four hours discussing the strategy and shape of the Budget Mr. Denis Healey will present on April 11, amid some *signs of progress towards a consensus.*

The talks, held at Chequers, represent a distinct departure from previous practice, by allowing departmental Ministers a chance to give the Chancellor their own views while his proposals are at the formative stage.

Last night Senior Ministers were stressing that no decisions were taken and the position *remains open. Mr. Healey is* leaning towards a more cautious approach than seemed probable a few weeks ago — an attitude that will have been reinforced by the disturbing economic indicators issued last week, on the trade and money supply fronts.

It seems likely that he will have resisted Ministers, led by Mr. Anthony Wedgewood Benn, the Energy Secretary and including, it is understood, Mrs. Shirley Williams the Education Secretary, who want a much more ambitionus package than the maximum £1.5bn. to £2bn. injection now said to be being pressed on the Chancellor by the Treasury.

But by all accounts the exchanges, reported to be "good and candid," produced a less dramatic confrontation between the two schools than was feared in some quarters.

Ministers were emphatic that the quest for the correct balance in the April package will, if anything be more complicated and delicate this year than on previous occasions—even if electoral considerations are set aside.

The nub of the dilemma for the Chancellor is that the 3.5 per cent. growth for the economy forecast for this year is unlikely to be met without an added boost from the Budget. But this has become a riskier proposition after the latest figures on monetary growth and the expansion of imports.

In tactical terms the Chancellor has to decide how he imparts the stimulus: although tax cuts are certain, the choice between action on tax allowances or a cut in the bottom band has to be made. The Government's Liberal allies for their part, would like more done on the direct tax front, if necessary offset by changes in VAT or other indirect taxes.

Every sign is that the Chancellor will take full advantage of the time in hand by waiting to see the picture that emerges from the indicators between now and early April.

THE LEX COLUMN

Coral paying over the odds

Shares in Coral Leisure have dropped by a quarter—four times more than the market as a whole—since just before its bid for Pontin's was announced early last month. There are no signs that its shareholders are going to register any serious opposition to the deal when they meet this week to approve the capital increase necessary for it to go ahead. But they may still have an uneasy feeling that they are paying over the odds for Pontin's.

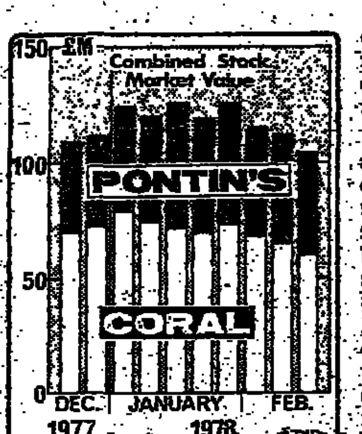
While Coral's shares have been falling, the value of its bid has been propped up by the cash element — which now accounts for over a third of the offer. So whereas the market value of Coral which made profits of £18m. pre-tax in 1977, is now down to £59m., the bid is currently worth £48m. Pontin's is expected to make just £7.3m. in 1977-78.

Moreover, while Coral's profits have shot ahead in recent years, Pontin's have fallen well behind the rate of inflation in terms of profits per share. And its return on capital employed has not been impressive, which tends to throw cold water on the suggestion that its net assets are worth considerably more than the book figure of about £41m.

Critics of the bid argue that there is little scope for improving this performance. They say that Pontin's marketing is already good, and that Coral will be able to add little to the image created by Sir Fred Pontin. Coral is still digesting last year's £16m. take-over of Centre Hotels, whose chief executive has just left the group. It is now proposing to absorb a much larger operation, which has been managed in a distinctive style by a man who is now in his seventies—and who made the initial approach for the take-over.

Against this, Coral thinks there is room for improving the returns on Pontin's overseas business, which produced about a sixth of this year's profits. Recent expansion by Pontin's in the U.K. is now reaching the pay-off stage. And there is also said to be room for developing joint interests in such areas as licensed catering and bingo.

Above all, the bid for Pontin's is seen as a unique opportunity to use the enormous cash flows being generated by Coral's casinos as a means of broadening the base of the group into a solid, established business. The casinos could have accounted for as much as £11m. of Coral's profits last year. No wonder the group is anxious to reduce this exposure.



But Coral will need some years to prove its point. Meanwhile the enlarged group will have quite high financial gearing—debt of about £40m. compared with tangible net worth of £56m.—and profits of about £24m. after financing costs. With a combined market capitalisation of £104m., the shares are leaning for support on their dividend yield of 8½ per cent.

Institutions

It is desirable in theory to create closer ties between companies and their institutional shareholders, but it is very difficult in practice. The latest CBI evidence to the Wilson Committee does little more than remind us of this. It reads almost as though the CBI working party has cast around for a new proposal and has finally fallen back on a reheated version of an old CBI idea—that more British companies should have non-executive directors from other companies.

The new evidence divides cleanly into two parts. There is a cogent explanation why non-executive directors are a good idea. There is fresh exhortation for industry to establish closer contacts with shareholders. Linking the two there is only a very guarded explanation of how the first might be a way of achieving the second.

The problem is to fill the "proprietorial gap"—the gap left by the fact that, unlike the entrepreneur-shareholder of old, an institution does not want, and is not able, to act as proprietor of a company in which it has a major investment. The CBI recognises that non-executive directors could provide the missing link between the boardroom and the institutions. It is also aware that if enough able non-executive directors are t found they will have to b drawn from the ranks industry.

But the working party bau at stating that non-executiv directors could serve as boar room ambassadors for maj shareholders, and could perha be proposed by them. It mere says that they would be we placed "to draw the attentio Board colleagues to decisio on which it would be desirabl to consult the institution shareholders." Only "as a la resort" should they consu such shareholders themselv

If institutions are to a more like proprietors, som unpalatable truths will have be faced. It may be undesirab that some shareholders shou know more about a compa affairs than others—but it already a fact. It may be u desirable that an institutio should lose the flexibility to di pose of its shares—but it already a fact. The consequen of these truths may be th major institutional shareholde need an able boardroo observer with whom they ca identify.

Double tax treaty

BAT Industries has given hope that the much-delay double tax treaty between Br tain and the U.S. will be ratifie in its present form. Cons quently, it has gone back calculating U.S. withholdi taxes at the rate of 15 per cen instead of the 5 per cent. ra provided for under the revis treaty, which it had been usi —in anticipation—since 1975.

The treaty was originally he up because of Californian o jections, since it would ha prevented the State applying unitary tax system to Britis based companies. Under th existing system, British co panies operating in Californ are taxed, not on the basis their accounting profits, but a proportion of their world-wi income, using supposedly obje tive criteria such as wage cost turnover and assets. This syste can be particularly tough f new businesses, facing start-u costs in the State.

But now the controversy ha escalated into a duel over Sta versus Federal rights to tax com panies. So it is anybody's gue what will happen if and whe (the Inland Revenue is talkin of early Spring) the treat comes before the U.S. Sena Foreign Relations Committe again. In the meantime, the o treaty still applies.

Radio men's action hits North Sea oil rigs

By Our Labour Staff

OPERATIONS ON about a dozen North Sea oil rigs, including platforms in the Brent and Thistle fields, will be disrupted from to-day as 44 radio controllers start an official work to rule because of a pay dispute.

No major interruption to production of oil is expected initially, but there will be a threat to supplies if action is prolonged.

The radio controllers hold key positions in North Sea oil operations because they handle all communications with supply bases. In particular they are responsible for radio communications with helicopters and supply vessels.

The trouble has been brewing since last October when the National Maritime Board concluded a Stage Two pay deal for officers working in the North Sea and also agreed to a self-financing productivity scheme to give between 12.5 per cent. and 14 per cent. extra from November.

The Radio and Electronic Officers' Union claims that 44 of its members working on rigs owned by Shell, British National Oil Corporation, BP and Texaco, are being excluded from the productivity deal because for the first time they have been placed outside the Marine Board settlement.

More talks

Marconi Marine which employs the radio controllers is *paying* the Stage Two increase but has told the union that a separate productivity deal must be negotiated for work on oil rigs. To adopt the same deal as that reached for officers on deep sea vessels would, it is feared, be in breach of the Government's pay guidelines.

Separate negotiations for oil rig work have been in progress since December but the union is insisting that the Board payment should be made in the interim.

Mr. Jack Bromley, deputy general secretary of the REOU, said yesterday it was decided to go ahead with the work-to-rule after negotiations failed to make progress on the union demands.

A further meeting was planned later this week but meanwhile, radio officers would be refusing to work longer than the stipulated 12 hours a day for a 14-day stint and meal breaks would be strictly observed.

He said the "sudden" departure from the NMB pay agreement by Marconi raised a number of difficulties in operating the complex pay structure because officers were often transferred between deep sea vessel work and work on oil rigs. Average pay at present was *between £7,000 and £8,000 a year.*

He believed that his members could justify a similar productivity bonus on oil rigs to that on deep sea vessels.

The prospect of a build up to a strike by the radio officers is expected to lead oil companies to put pressure on Marconi for an early settlement.

CBI urges closer contact with shareholders

BY NICHOLAS COLCHESTER

THE Confederation of British Industry has again urged that executive directors should act as non-executive directors on the boards of non-competing companies. It suggests such arrangements—to help develop the relationship between companies and their shareholders — in evidence to the Wilson Committee studying the financial institutions.

The CBI proposal is a development of one submitted 18 months ago to the Bullock Inquiry on industrial democracy. Companies should, the CBI feels, have at least three such directors. This "cross-fertilisation" plan should initially be applied to the top 200 British companies, whose equity accounts for some 80 per cent. of the market capitalisation of quoted companies.

Boards of companies should take the initiative in developing contact with shareholders, particularly with institutional shareholders—"there is scope for the number of these contacts to be increased," the CBI says.

The evidence maintains that because the Institutional Shareholders *Committee must act* with great discretion, its influence is not fully appreciated and its function is not understood by companies.

Colleagues

The CBI declares: "Any non-executive director would be particularly well-placed both to call the attention of his Board colleagues to decisions on which it would be desirable to consult institutional shareholders, and thereafter, and as a last resort, to be prepared to consult directly with such shareholders.

"Because they cannot be expected to concern themselves with the day-to-day problems of the company, non-executive directors have a special contribution to make to the debate about longer term issues: *because they are informed and* involved, but at the same time detached and dispassionate, they can contribute valuably different views to board room discussions. In the extreme, not being dependent on the company for their livelihoods, non-executive directors can sometimes have a greater freedom of action."

The evidence was prepared by a working party headed by Sir Arthur Knight, chairman of Courtaulds.

Directors facing problems may approach City panel

BY MARGARET REID

DIRECTORS of public companies with management difficulties will in future be able to approach the City's Institutional Investors Committee, set up to co-ordinate action among investing institutions over problem companies.

Until now, the committee—of which little has been heard *publicly since it was established* in 1973 with the encouragement of Lord O'Brien, former Governor of the Bank of England—has acted only when worries about any particular company have been raised within the investment community.

However, according to a statement to-day, "A company will itself be able to use the machinery of the committee to facilitate an approach by a Board to its institutional shareholders where contacts do not already exist."

The committee was created by the British Insurance Association, the National Association of Pension Funds, the Association of Investment Trust Companies and the Unit Trust Association. The object was to stimulate action by industrial and commercial companies to improve efficiency.

But the committee has followed the principle of seeking to do good by stealth—by keeping its activities so secret that they are virtually unknown in many quarters—and have so far made no marked impact on the business scene.

Although the committee has considered a number of problem cases over the last four years, fewer have come to it in the last few months, partly because the better financial climate has reduced the scope for serious problems arising.

So now the committee, whose present chairman is Lord Remnant, is to be open to approaches in strict confidence from any director of any company who wants to discuss its management problems.

Normally, though, such an initiative would be acted on only if the approach were made with the knowledge of the company's chairman, since any case committee formed to investigate the matter would have to discuss the problem with other members of the Board.

It is also proposed that the committee should do more to encourage better communication between company Boards and shareholders, even where criticism of management may not be involved.

Powell 'guilty of race deception'

BY RUPERT CORNWELL, LOBBY STAFF

Mr. Enoch Powell's insistence that repatriation is the only means of curbing the growth of Britain's immigration community was criticised sharply yesterday by Mr. David Lane, chairman of the Commission for Racial Equality. Pointing to Mr. Powell's suggestion in a major speech at the week-end that Mrs. Margaret Thatcher was poised to "deceive" the electorate by making promises she could not keep, Mr. Lane accused him of misleading people himself.

"In apparently advocating the mass expulsion of coloured people, Mr. Powell must know that no British Government could contemplate policies of that sort. He himself is guilty of the cruel deception of which he accuses others, and is adding to the fears of minority communities."

Mr. Mark Carlisle, a Conservative Home Office Minister between 1970 and 1974 who was closely involved with the Heath Government's immigration policies, rejected as "absolute nonsense" Mr. Powell's claim that the public had been deceived by Tory electoral pledges.

"Mr. Powell is muddling two *things, immigration and the* number of people already here," he said. "Mrs. Thatcher has talked about reducing the rate of new immigration, but never of reducing the number already here. This could be done *only* by forced repatriation which would not be acceptable."

The next Conservative Government, he said, should cut the number of potential heads of households coming in. He implied that the main change from present Labour policy would be to reverse the decision of Mr. Roy Jenkins to allow male fiances greater freedom of entry.

Mr George Gardiner, Tory MP for Reigate, suggested that the inflow could be lowered by setting up a register of dependents *and fixing annual quotas.*

"But we cannot and will not heed Mr. Powell's call for large scale repatriation of families who have perfectly legally settled here. Rounding up coloured men, women and children and packing them onto planes would be totally repugnant to the vast majority of British people."

Weather

U.K. TO-DAY

MANLY dry, very cold.

London, S.E. and Cent. England, Midlands, Channel Is.

Mainly dry, cloudy. Wind E., strong or fresh. Max. 1C (34F).

E. Anglia, E. and N.E. England

Snow showers on coasts. Sunny intervals. Wind E., moderate or fresh. Max. 1C (34F).

S.W. England

Mainly dry, cloudy. Wind E., fresh. Max. 5C (41F).

Wales, N.W. England, Lakes, I. of Man, N. Ireland

Mostly dry, sunny spells. Wind S.E., moderate or fresh. Max. 2C (36F).

Scotland

Mostly dry. Sunny spells. Wind variable, moderate. Max. 1-2C. (34-36F).

Outlook: Very cold.

BUSINESS CENTRES

		Y'day mid-day °C	°F			Y'day mid-day °C	°F
Amstdm.	C	−2	28	Luxemb'g	Sn	−5	23
Athens	S	15	59	Madrid	R	12	54
Bahrain	S	15	59	Manchestr	C	1	34
Barcelona	S	19	66	Melbourne	C	19	66
Beirut	C	18	64	Milan	D	1	34
Belfast	C	2	36	Montreal	C	−11	12
Belgrade	C	−2	28	Moscow	S	−7	19
Berlin	S	−4	25	Munich	Sn	−6	21
Brmghm	C	1	34	Newcastle	C	2	36
Bristol	C	1	34	New York	S	−2	28
Brussels	C	0	32	Oslo	F	−8	18
Budapest	C	−3	26	Paris	C	−1	30
B. Aires	R	22	72	Perth	S	32	90
Cairo	S	24	75	Prague	S	−6	21
Cardiff	C	−1	30	Reykjavik	Sn	2	36
Chicago	S	−9	16	Rio de J'o	S	30	[illegible]
Cologne	F	−1	30	Rome	C	15	59
Copnhgn	S	−4	25	Singapore	R	31	88
Dublin	C	3	37	Stockholm	S	−7	19
Edinbrgh	C	2	36	Strasbrg	Sn	−3	27
Frankfurt	C	−3	26	Sydney	S	29	84
Geneva	R	2	36	Tehran	S	17	63
Glasgow	C	2	36	Tel Aviv	C	16	61
Helsinki	S	−12	10	Tokyo	C	3	37
H. Kong	C	16	61	Toronto	S	−8	18
Jo'burg	F	19	66	Vienna	C	−6	21
Lisbon	R	14	57	Warsaw	S	−7	19
London	C	4	39	Zurich	Sn	−3	27

HOLIDAY RESORTS

		Y'day mid-day °C	°F			Y'day mid-day °C	°F
Ajaccio	C	18	64	Jersey	D	3	37
Algiers	S	25	77	Las Plms	S	22	72
Biarritz	F	16	61	Locarno	D	2	36
Blackpool	C	3	37	Majorca	S	19	66
Bordeaux	C	15	59	Malaga	F	21	70
Boulogne	C	0	32	Malta	F	18	64
Casablnca	F	19	66	Nairobi	S	24	75
Cape Town	S	26	79	Naples	F	14	57
Corfu	F	14	57	Nice	D	9	48
Dubrovnik	C	9	48	Nicosia	S	18	64
Faro	C	18	64	Oporto	D	1	34
Florence	C	10	50	Rhodes	S	18	64
Funchal	F	19	66	Salzburg	Sn	−5	23
Gibraltar	F	19	66	Tenerife	S	17	63
Guernsey	D	2	36	Tunis	S	24	75
Innsbruck	C	−6	21	Valencia	S	22	72
Inverness	S	−5	23	Venice	C	1	34
Isle of Man	C	3	37				

S—Sunny. F—Fair. C—Cloudy R—Rain.
D—Drizzle. Sn—Snow.

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Carter talks as coal peace bid fails

industry is situated, faces grim prospects if the strike is not settled quickly. Although the effects of coal shortage and bad weather in the worst-hit States have been localised, lay-offs of workers have started and more than 500,000 redundancies are threatened.

The main reason for this is that it takes three weeks from the resumption of mining to rebuild minimum stockpiles—and spring is still more than a month away in this most brutal of winters.

Coal supply is at its worst in parts of Indiana and Ohio. However, the state of Illinois, although heavily industrialised, is enjoying the fruits of recent heavy investment in nuclear power stations. So much so that it is preparing to assist neighbours with reserve power.

Illinois obtains more than half of its electricity from nuclear sources. From to-morrow, it will begin re-activating a number of turbine power stations which were closed recently as surplus to requirements.

These will be used to channel additional power to Indiana, and on to Ohio if needed. In this way, Illinois is capable of providing an additional 400 megawatts of capacity to these states, although it is not clear whether inter-state transmission lines could accept such an amount.

Registered at the Post Office. Printed by St. Clement's Press for and published by the Financial Times Ltd., Bracken House, Cannon Street, London EC4P 4BY.